MINISTRY OF NATURAL RESOURCES

Thunder Bay District

LAND USE GUIDELINES

Ontario

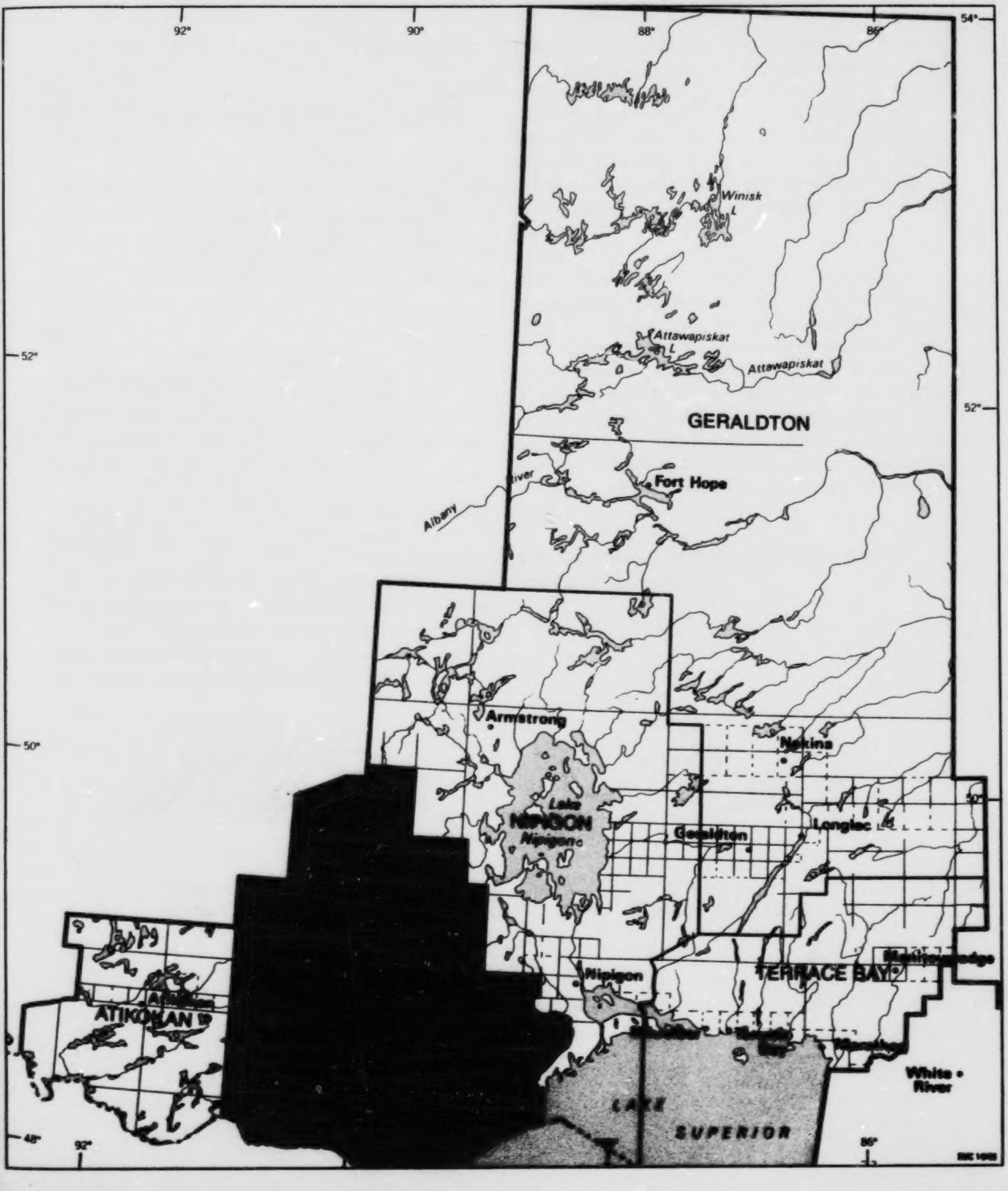
Ministry of
Natural
Resources

Hon. Alan W. Pope
Minister

W. T. Foster
Deputy Minister

1983

NORTH CENTRAL REGION **Figure 1**


92°
90°
88°
86°
54°
52°
52°
50°
50°
48°
92°
86°
Winisk L
Attawapiskat L
Attawapiskat
GERALDTON
Albany River
Fort Hope
Armstrong
Nakina
Lake NIPIGON
Nipigon
Geraldton
Longlac
Nipigon
Manitouwadge
TERRACE BAY
White River
LAKE SUPERIOR
ATIKOKAN
50
0
50
100
150 km
25
0
25
50
75
100 m

FOREWORD

The Ministry of Natural Resources has a primary responsibility for the management of the Province's natural resources, in particular those related to resource development and outdoor recreation.

This document will serve a design for integrated resource development in the Thunder Bay District. It is also intended to provide others with an understanding of the Ministry's mandate and its programs which rely on both Crown and private lands for success.

To ensure an integrated approach the *Thunder Bay District Land Use Guidelines* identify where and in what manner the Ministry may use Crown land, and to what extent it may wish to suggest uses of private land, in working towards the achievement of Ministry objectives.

For Crown land the Ministry must consider the land and water requirements for both its own programs and those of other government agencies. This will require ongoing liaison with these other agencies. The Ministry will continue to consult with private landowners and local municipalities since the latter have the responsibility for control of private land use.

The program targets and approaches outlined in this document follow the overall direction outlined in the Ministry's *Northwestern Ontario Strategic Land Use Plan*. This document may serve as one of the sources of information for Ministry involvement in the planning process of municipalities and other agencies. It is recognized, however, that this document has no legal status.

Planning is a continuous process and must be responsive to changing needs and technology. Thus the targets and strategies presented in this document are subject to revision based on such factors as changes in government policy, new or refined resource information, and significant changes to land use in other planning documents. To accommodate changes the *Land Use Guidelines* will normally be reviewed every ten years and will involve full public consultation.

Comments may be addressed to the District Manager at anytime.

Regional Director
North Central Region

District Manager
Thunder Bay District

contents

Page

FOREWORD v
CONTENTS vii
FIGURES viii
TABLES viii

I INTRODUCTION 1
A: district context 1
B: terms of reference 2
C: planning process 5
D: target assignment 6
E: summary of planning options 6
F: response to plan options 7

II POLICIES AND GUIDELINES 9
A: introduction 9
B: general policies 9
  1. THE PUBLIC INTEREST 9
  2. ENVIRONMENT 9
  3. ENERGY 10
  4. LANDS AND WATERS 12
  5. AGRICULTURE 18
C: resource policies 20
  1. COMMERCIAL FUR 20
  2. FIRE MANAGEMENT 20
  3. FISHERIES 22
  4. FORESTRY 25
  5. MINING 26
  6. PROVINCIAL PARKS 29
  7. TOURISM 34
  8. WILDLIFE 35
  9. WILD RICE 39
  10. SUMMARY OF TARGET ACHIEVEMENT 40
D: land use areas — guidelines 41
  1. THUNDER BAY URBAN AREA 44
  2. RURAL AREA 47
  3. SIBLEY 52
  4. LAKE SUPERIOR 53
  5. BOUNDARY WATERS 56
  6. NORTHERN LIGHT LAKE CORRIDOR 60
  7. MATAWIN 65
  8. HURONIAN 68
  9. SHEBANDOWAN - LAC DES MILLE LACS 70
  10. ENGLISH RIVER 75
  11. DOG LAKE 77
  12. SPRUCE - CURRENT 80
  13. GREW RIVER 82
  14. BRIGHTSAND 84
  15. GRAHAM 86
  16. KOPKA 88
  17. HINTERLAND 90
E: application 95

APPENDICES 97
A: public consultation 98
B: identified prime lake trout lakes 103
C: identified tourism lakes 104
D: cottaging lakes 105
E: forest management agreements 106

GLOSSARY 107

figures

FIGURE 1: REGIONAL CONTEXT iii

FIGURE 2: AREA DESIGNATION 43
(page size)

FIGURE 3: AREA DESIGNATION
(1:250,000) (inside back cover)

tables

TABLE 1: STATUS OF CANDIDATE PARK AREAS 31

TABLE 2: SUMMARY OF TARGET ACHIEVEMENT 40

I INTRODUCTION

A: district context

The Thunder Bay District is one of five administrative Districts in the North Central Region of the Ministry of Natural Resources (figure 1). Together with the Northwestern Region they make up the Northwestern Ontario Planning Area which extends from Terrace Bay to the Manitoba border. A Strategic Land Use Plan was approved for this planning area in May 1982.

Thunder Bay District covers 31,155 square kilometers (12,170 square miles) and includes 69 townships and three (3) Indian Reserves.

The climate is characterised by wide annual temperature extremes, moderately low humidity, high levels of sunshine, and moderate winds, typical for a midlatitude inland location. The moderating influence of Lake Superior extends inland for only 16 km.

Thunder Bay District lies in two (2) forest regions: Great Lakes-St. Lawrence in the south and Boreal in the north. Birch, poplar, black spruce, white spruce and jack pine are the main tree species.

The Precambrian Shield is the major factor influencing the District's topography. However, the Shield has been modified by glaciation with outwash sand plains, eskers, moraines and a thin overburden of till. The most notable feature is the Nor'Westers Mountain Range which extends along the Lake Superior shoreline. The remaining portions of the District can be described as gently to moderately rolling plains with bedrock outcrop.

The Height of Land dividing the Arctic watershed from the Great Lakes-St. Lawrence watershed passes through the District.

Most of the District's soils are shallow sandy tills over bedrock with a band of deeper soils ranging from sandy lacustrine deposits in the northwest to silty clay in the northeast.

Archaeological work indicates at least a 10,000 year span of history in which Palaeo Indians, the Shield Archaics, the Woodland Indians and the Copper Culture have been identified in the District. Archaeological surveys have focused on the south half of the District and this is reflected in the more than 300 identified sites. The northern portion of the District remains unsurveyed.

Settlement in this area by the white man is closely related to the fur trade and the westward praire expansion. Westward travel focused on the Kaministiquia River route, the founding of Fort William in 1801, plus the development of "The Station" at Current River. In 1857 the Canadian Pacific Railway began the transportation link between Fort William and Winnipeg. This was followed by a period of rapid development which included mining, lumbering and agricultural activities. Based upon these activities the cities of Fort William and Port Arthur developed.

The District is still dominated by those twin cities; now called The City of Thunder Bay. It forms a Regional centre for population, industrial, transportation, commercial, cultural and social services. It is surrounded by rural townships whose economic activity also focuses on the industries, businesses and services of the City.

Local transportation began with the water routes of the fur trade. Today, Thunder Bay is an important harbour for transhipping grain, ore, coal and other bulk freight, and is the focus for an extensive highway system which radiates south, west and north linking it to the USA, Manitoba and the rest of Ontario. Both the Canadian Pacific and National Railway lines service the District and the station in Thunder Bay is a "break of bulk" point for freight shipments. The international airport in Thunder Bay services the Region and is augmented by several small air strips, and sea plane bases throughout the District.

Two pipelines cross the central portion of the District. Numerous hydro transmission corridors throughout the south half of the District distribute power Regionally as well as to local communities and to popular recreation areas (Shebandowan, Arrow Lake).

B: terms of reference

The *Land Use Guidelines* relate the policies of the *Northwestern Ontario Strategic Land Use Plan (NWSLUP)* to the Thunder Bay District planning area by identifying the specific lands and waters necessary to achieve the Ministry's program targets.

The *Thunder Bay District Land Use Guidelines* identify land use areas that contain detailed use areas and management guidelines. These guidelines outline how the Ministry proposes to use public land and how it would like to influence management of private land use to achieve its resource objectives and targets.

The *Land Use Guidelines* indicate what the Ministry of Natural Resources wishes to achieve on Crown land, and influence on private land and the lands of other agencies such as Conservation Authorities, in order to achieve Ministry objectives. The document has no legal status. The planning control of private land in organized municipalities is exercised through municipal planning documents which are prepared in accordance with and under the authority of the *Planning Act* which is administered by the Ministry of Municipal Affairs and Housing.

There will be occasions when the Ministry will feel that a certain land use or proposed development on private land, while in conformity with municipal official planning documents, will have a negative impact on Ministry programs or interests. In such situations, the Ministry will attempt to resolve the problem through discussions with the proponents, the municipality and the Ministry of Municipal Affairs and Housing. If the Ministry is not satisfied with the results of the negotiations, they may consider taking further action under the procedures provided for by the *Planning Act* and in accordance with MNR policy.

The Ministry recognizes that private landowners, other government agencies, municipalities, conservation authorities and interest groups are key participants in any effort to achieve effective and integrated resource management. The Ministry will continue to work with these groups, especially with municipalities through the Ministry's plan input and review program to ensure that natural resource values are considered in local planning documents.

Existing plans of other agencies which guide development in Thunder Bay District include:

a. Long Range Strategies
Northwestern Ontario: A Strategy for Development was prepared by the Ministry of Treasury, Economics and Intergovernmental Affairs in 1979 as a follow-up to the 1971 *Design for Development*. This document reviews the steps taken to implement *Design for Development*, describes issues in the Region and outlines proposals to address these issues. It has four (4) primary objectives:
1) to reflect local experience and aspirations;
2) to be compatible with national and provincial policies and constraints;
3) to represent all government agencies; and,
4) to present a commitment to continued growth in Northern Ontario.

b. Future Transportation Plans
(i) Highways The objectives of these transportation plans are to improve accessibility and reduce cost of moving within and through the District. There are a number of recommended

highway improvements. These include:
1) improvements to Hwy. 102 (alignment and surface);
(2) improve Hwy. 11 and 17 to four (4) lanes between Nipigon and the Manitoba border;
3) improvements to Hwy. 61 from Thunder Bay to the USA border; and,
4) discussion of a highway corridor between Hwy. 599 and Hwy. 527.

Such improvements could require portions of Crown land adjacent to the existing right of ways.

(ii) Airport The Federal Department of Transportation Airport Study examined potential sites for an expanded or new international facility for Thunder Bay. Attention was focused on the urban and rural areas around the City. Still at the planning stage, this new facility could require Crown land and could influence resource management programs in this area.

c. Long Range Energy Plans

Future plans for electric power generation in Northwestern Ontario include the expansion of the existing thermal station at Thunder Bay, and construction of the long range East-West Tie Line that will link Northern and Southern Ontario and cross the Thunder Bay District. The new thermal plant at Marmion Lake in Atikokan District will be linked to Thunder Bay in the future.

The energy issue is also focusing attention on developing small hydro generating sites that could supply remote communities. The development of alternate energy sources such as peat are also being investigated.

d. Trans Canada Pipeline

The Trans Canada Pipeline plan for twinning its corridor across Northwestern Ontario will require some additional land for corridor expansion. However, since it does not include a location change its impact will be minimal.

e. Municipal Plans

(i) Lakehead Official Plan The *Official Plan for the City of Thunder Bay* was developed to coordinate land use policies and promote a pattern of land use that is "efficient, economical and livable". The official plan and its implementing zoning by-laws are being updated.

(ii) Rural Planning Project The Regional Lakehead Planning Board was formed in 1957 in response to common land use problems expressed by the local municipalities. Within the planning area are the City of Thunder Bay, the municipalities of Neebing, Paipoonge, Shuniah, O'Connor, Conmee and Oliver and the unorganized townships of Gorham and Ware. They are presently updating the *Lakehead Official Plan* and its implementing by-laws through the Rural Planning Project.

The Ministry of Natural Resources has provided resource data for these plans and reviewed and commented on them. Of major concern is the Provincial hazard land program which restricts development in order to protect life and real property, and the mineral aggregate policy which identifies aggregate for extraction before it is locked up by surface development.

(iii) Other In addition to the above there are Ministry of Municipal Affairs and Housing zoning orders on Scoble, Pearson, Gorham and Ware Townships which provide local land use guidelines for controlling private land development in the unorganized townships.

f. Lakehead Region Conservation Authority

Conservation authorities are independent corporate agencies set up jointly, under the *Conservation Authorities Act*, by the local municipalities and the Province of Ontario to develop and implement water and related land management programs. The *Conservation Authorities Act* is administered on behalf of the Province of Ontario by the Ministry of Natural Resources.

The primary program of authorities in flood and erosion control complements the Ministry's programs while the authorities other programs, particularly those in forestry, fish, wildlife and recreation, supplement the efforts of the Ministry in these same areas. Both agencies are making every effort to reduce duplication and overlap in their planning and to ensure that the delivery of resource management programs achieves the greatest possible benefits to the people of Ontario.

The Lakehead Region Conservation Authority is presently preparing a watershed plan to provide direction to their programs on flood-erosion control, water management, rural drainage, recharge-source areas management, water related land management, conservation-recreation and information-education.

In addition to this watershed plan, it prepares master plans for the resource management, development and use of Authority land holdings.

Plans have been completed for Hazelwood Lake and Silver Harbour.

g. Ministry of Natural Resources Management Plans

Existing Ministry plans which guide resource management in local areas will be updated to conform to the *Land Use Guidelines*. They include:

(i) Graham Area The *Graham Planning Area - Interim Plan* plan was prepared and implemented in 1972 to prevent the development of resource conflicts in the Graham area of the Thunder Bay District. The intent of this local area plan is reflected in several of the land use areas of the *Thunder Bay District Land Use Guidelines*. The *Graham Plan* will be updated and retained as it provides a greater level of land use planning detail for this specific area.

(ii) Shebandowan Lake In the middle 1970's the Shebandowan Lake area of the District was beginning to develop recreation user conflicts and signs of overuse were apparent, especially on Lower Shebandowan Lake. In an attempt to resolve the situation the Thunder Bay District began preparing a local area land use plan which would be implemented under Section 13 of the *Public Lands Act*. The plan has had considerable public input and is in the final stages of completion. While not yet approved the *Shebandowan Lake Land Use Plan* will be retained in support of the *Thunder Bay District Guidelines* since it provides an additional level of detail for a portion of Area 9.

(iii) The International Boundary Waters In 1970 the *Management Guidelines for the International Boundary Waters* approved by the Minister of Natural Resources, were prepared for the area southwest of Thunder Bay along the Canada-United States border. The purpose of the *Guidelines* was to ensure the maintenance of the recreational attributes of this internationally popular area. The intent of the *Guidelines* has been incorporated into land use area number 5 of the *Thunder Bay District Land Use Guidelines*. The *Management Guidelines* will be updated, brought into conformity with the *Land Use Guidelines* and retained to supply supplementary detail for the management of this particular land use area.

(iv) Northern Light Lake Area Another popular recreation area in the Thunder Bay District, also located southwest of Thunder Bay, is the Northern Light Lake area. The advent of increased forestry operations resulted in the preparation of the *Northern Light Lake Interim Management Plan*. The purpose of this plan was to protect the area's private, public and commercial recreation and tourism benefits while still permitting resource development. This plan was implemented in 1972 by the Ministry and has influenced the intent of land use area numbers 6, 7 and 17 in the *Thunder Bay District Land Use Guidelines*. The *Northern Light Lake Interim Management Plan* will be updated, brought into conformity with the *Land Use Guidelines* and used to provide additional information for the management of this specific land use area.

(v) North Central Region Recreational Zoning Plan In the early 1970's the *North Central Region Recreational Zoning Plan* was implemented in order to guide the disposition of Crown land for recreation purposes such as cottaging and outpost camp development. With the completion of land use guidelines in the North Central Region the *Recreational Zoning Plan* may be rescinded.

(vi) Other Management Plans In addition to these local land use plans there is one forest management agreement on the Spruce River Forest signed with Abitibi-Price Inc.. A forest management plan is being prepared for this agreement area. Several other forest management plans are being prepared for other licence areas and the Crown Management Units in the District.

As well, Kakabeka Falls, Sibley and Ouimet Canyon Provincial Parks have approved Master Plans.

In the event of conflict between previous Ministry plans prepared for the Thunder Bay District and the 1983 *Land Use Guidelines*, the latter will provide the overall direction. In the future, the *Land Use Guidelines* may be modified to reflect new information and changing circumstances.

C: planning process

The *Thunder Bay District Land Use Guidelines* have developed through a number of stages, collectively known as the planning process. Important to this process was public involvement which first began with the development of the Ministry's *Northwestern Ontario Strategic Land Use Plan* but increased locally when it was announced that land use guidelines were being prepared. A background information document for the Thunder Bay District was prepared and circulated. Open houses were held in March of 1982 to display and explain the background information and the Ministry's planning process. The public was asked to comment on the accuracy of the Ministry's information and to provide any additional knowledge they had of the planning area and raise any problems or issues they felt should be addressed during the planning process.

In 1982 the Ministry produced a second document that outlined three (3) optional land use plans for the Thunder Bay District. Open houses were held in June of 1982 by the District to explain the policy and proposals outlined in the document and invite public comment. In addition to receiving many verbal and written comments as a result of the open houses and circulation of the documents, the Ministry held many follow-up meetings with municipalities and interest groups at their request. All public input was recorded, responded to where necessary, filed, analysed and evaluated.

Based on the analysis and evaluation of all the public input received, a final draft of the *Land Use Guidelines* was prepared. The Minister personally reviewed the District summary and analysis of public comment and discussed the draft *Land Use Guidelines* with the District Manager. Further modifications were made to the document as a result of the Ministry's internal review.

Copies of all comments received are available for viewing in the District Office, the Ministry's Main Office public reading room and the Legislative Library at Queen's Park. Details of the public consultation program, such as the attendance at open houses and the number of responses received, are found in appendix A.

D: target assignment

The *Land Use Guidelines* represent the way in which the District may utilize its land and water resources to achieve the targets assigned by the *NWSLUP* (May 1982). The targets are derived through a consideration of local needs and resource potentials for each of the resource programs under the Ministry's responsibility. They are tested by the District on the basis of capability and this is outlined in detail in Section II C.

To determine how the targets could be achieved within the District, optional plans were developed and the public was consulted as to their social acceptability. In the options, not all of the assigned targets could be achieved and it was necessary to accept a level of achievement less than that which was prescribed by the *NWSLUP*.

E: summary of planning options

Optional plans are developed to show the various means in which land and water resources might be utilized to meet the resource program targets assigned by *NWSLUP*. In some options, not all of the assigned targets could be achieved because of priorities being given to different resource programs. This meant it was necessary to accept a level of achievement less than that which was prescribed in *NWSLUP*.

Three planning options were developed for Thunder Bay District: amenity, economic and composite. The amenity option considered significant increases in social benefits such as parks, recreational buffers and sport fishing, with an emphasis on environmental protection. It showed the impact this would have on future industrial uses such as forestry and mining. The economic option considered maximizing industrial and economic programs and showed the costs this would have on parks and the Crown land recreation programs. It considered economic extraction along with environmental protection. The composite option illustrated one possible blend of both amenity and economic considerations.

Another purpose for developing options and evaluating their target achievement was to display different approaches to the public for review, comments and opinions. Determining the social acceptability of the options assisted in evaluating and selecting a preferred plan. The three options were printed in a tabloid called *Thunder Bay District Land Use Plan Options* and widely distributed in June 1982. The options were also displayed at open houses and broadcast on community television during June. A brief summary of each of the options is described below.

1. **OPTION 1**

The key objective of the amenity option was to meet the social needs of the people of Ontario; particularly those within the Thunder Bay District. This involved providing new recreational opportunities in provincial parks, ensuring that a wide variety of high quality cottaging, canoeing, fishing and other Crown land recreation activities were available. As well, this option focused on protecting the recreational and aesthetic values of existing cottage and tourism areas, and ensuring that environmental protection was a major consideration in resource extraction activities while maintaining the present level of these uses in the District.

2. **OPTION 2**

The main thrust of the economic option was to meet industrial and economic needs of the Province, particularly within the Thunder Bay District. This favoured resource extraction by reserving as much of the resource base as possible for future extraction and minimizing constraints put on industry, while protecting the recreational interests of existing cottagers, tourism operators and Crown land recreationalists.

3. **OPTION 3**

The compromise option illustrated a blend of recreational and amenity land uses with industrial and economic land uses. Its objectives were to keep large areas of the District resource base available for future resource extraction; limit the constraints placed on industrial use, yet protect significant recreational areas for tourism, cottaging, Crown land recreation and provide for additional park benefits.

F: response to plan options

Approximately 500 people attended the Thunder Bay open houses on the planning options. The local newspaper advertisements, posters, open line community television show, community radio announcements, District news releases, letters of invitation and distribution of the tabloid to over 3500 interested people helped to generate this high level of interest in the planning project.

The open houses were followed up by presentations and meetings with local interest groups such as the Northern Light Lake Campers Association, North Shore Citizen's Committee for Responsible Forest Management, City of Thunder Bay Council, Highway 588 Tourist Association, Upsala residents group, Saganaga Lake residents group and the Governor's Advisory Committee on the Boundary Waters Canoe Area (Minnesota).

Over 400 replies in the form of letters, comment sheets and petitions (approximately 8500 names) were received after these open houses.

Rather than commenting on a specific option most people expressed their ideas and options regarding resource management and land use issues. All comments received during the optional plan review can be viewed by the public at the Thunder Bay District Office, the Ministry's Main Office public reading room and the Legislative Library at Queen's Park.

As a result of the public input and associated analysis, the District reassessed the proposals and developed an option which attempts:

- to maintain the status quo for resource extraction activities such as forestry, mining and commercial fishing;
- to encourage an increased quality of both recreation opportunities and resources in selected portions of the District for the personal enjoyment and continuing social benefit of the people of the area;
- to provide additional parks to meet our protection objectives; and,
- to meet the program targets assigned to the Thunder Bay District.

As a result, in this final concept, current levels of forestry, mining, aggregate production, commercial fishing, wild rice harvesting and agriculture are maintained and provision is made for each of their assigned targets to be met.

There is a slight decrease in the area available for hunting, but intensive resource management will enable the harvest targets to be met. Existing levels of Crown land recreation will be reduced in some areas of the District and be maintained or even allowed to expand in other areas which are identified for recreation. Reductions will be implemented in order to redirect users to other areas of Crown land or to the available commercial tourism facilities; or to allow Crown resources to re-establish themselves so that they can sustain use. Cottaging activity will be maintained at its present level and as demand warrants additional cottage lots will be provided through the lake planning process. The 24 lakes to be considered for cottaging are listed in appendix D.

Increased levels of tourism activity are provided for in this concept. Areas with good tourism potential are identified in the document and resource management activities will consider the needs of these existing or future tourist lodges or outpost camps. Twenty-three (23) lakes have been identified and are listed in appendix C.

Seventy-five (75) prime lake trout lakes have been identified (they are listed in appendix B) for protection in this concept. In addition to this the concept's land allocations will have minimal impact on the present level of sport fishing and the target can be achieved.

Northern Light Lake, Lac des Mille Lacs, Shebandowan and Dog Lakes have been identified as major recreational lakes in the District. Existing cottage development, tourism operations and Crown land recreation as well as the future expansion of these uses, warrant special resource management considerations. Resource extraction along their shorelines will be managed recognizing the recreational and aesthetic appeal of these lakes.

The final concept plan also recognizes nineteen (19) candidate areas recommended for park status and fifteen (15) Areas of Natural and Scientific Interest (ANSI). These areas are listed in Section II part C under Provincial Parks and Section II part D under *land use area — guidelines.*

A: introduction

The *Thunder Bay District Land Use Guidelines* indicate how the land and water resources within the District are to be utilized in the achievement of the resource program objectives assigned through the *NWSLUP*. In addition, this section indicates the general and particular resource policies that will guide program development and details recommended locations for carrying out specific activities and general operating guidelines for each.

When using this document as a guide for land use management the reader should refer to the general or resource policies outlined below as well as to the area land use policies and area map. This will ensure a clear understanding of the overall approach being outlined in this document as well as the specific policies and guidelines being applied to each area.

B: general policies

The statements contained in this section represent the overall policies guiding the activities of the Ministry of Natural Resources in Northwestern Ontario as summarized from the *Northwestern Ontario Strategic Land Use Plan.*

1. THE PUBLIC INTEREST

The Crown (Ontario) owned resources of the Province belong to all the people of Ontario and will be administered in the best interests of the provincial population as a whole, including the special interests of the residents of the areas where the resources are located.

a. Discussion

Native people living in Northwestern Ontario are among those having special interests. They are also users of natural resources in specific areas. When the Ministry's plans affect such areas, the Ministry will make every effort to communicate effectively with these people. It is recognized that special attention will be required due to language differences and the remoteness of most native settlements. Traditional native rights both within provincial parks and on Crown land will continue to be respected.

2. ENVIRONMENT

a. Objective

The Ministry of Natural Resources has a commitment to the maintenance and improvement of environmental quality at the broad level. Where new developments are undertaken by the Ministry at local levels, adverse environmental impacts will be minimized and appropriate rehabilitation actions will be undertaken as required.

b. Discussion

Because of its responsibility for resource management programs in a wide number of areas, the Ministry of Natural Resources has had a long standing concern for the quality of the environment since major harmful changes could adversely affect its programs. Among examples of this concern are: fish and wildlife management; hazard land mapping; subdivision review; forest management and lake development planning. Most Ministry programs give consideration to the landscape as a necessary component of the quality of life.

The Ministry has specific environmental responsibilities under various acts and programs. These include the implementation of the *Endangered Species Act* with regard to the protection of such species as the bald eagle and peregrine falcon and their habitat.

The Ministry's recreational programs focus on the environment as an amenity to be managed for the provision of outdoor recreation opportunities and to be protected to ensure lasting opportunities for the exploration and appreciation of the outdoor natural and cultural heritage of Ontario. Special features notable for their scenic beauty are identified in *NWSLUP*.

In addition, as input to the local planning process the Ministry strives to provide the best available information regarding the environment. For example, hazard land mapping allows for the identification of lands unsuitable for development by virtue of their susceptibility to flooding, erosion or instability.(1)

Sensitive areas identified in the planning process may be defined as those areas that contain features of value whose preservation may be defined as the main theme of management. The Ministry will continue its commitment to identify these sites through its component programs (e.g., Fish and Wildlife, Parks, etc.).

In cooperation with the Ministry of Citizenship and Culture, the Ministry of Natural Resources will assist in the management of significant cultural resources within provincial parks and on Crown land.

Furthermore, the Ministry of Natural Resources is concerned with the maintenance of water quality and quantity since changes in either can seriously affect many of its programs. The conservation authorities, fish and wildlife, lake planning and parks programs all share an interest in the maintenance of the aquatic environment.

Since the summer of 1979, staff of the Ministry of the Environment's Northwestern Region have conducted lake sensitivity sampling on approximately 250 lakes located in the Regional planning area. None of the lakes sampled had been acidified or showed evidence of acidification; a few show extreme sensitivity and the majority are moderately sensitive to acid deposition. The Ministry of Natural Resources concern over the effects of acid rain particularly on vegetation and fisheries habitat in Ontario has resulted in a 5 year experimental program with the Ministry of the Environment which began in 1981. The program is designed to investigate the feasibility of neutralizing acidic surface water to protect aquatic life in Ontario lakes susceptible to acid rain and to rehabilitate lakes already changed.

Finally, since the passing of the *Environmental Assessment Act* (1975), some of the Ministry of Natural Resources activities are subject to the *Act*. In order to meet its responsibilities under the *Act*, the Ministry will use a number of Class Environmental Assessments. These will require the Ministry to undertake public consultation before carrying out its various programs and projects.

3. ENERGY

a. Goal

The Ministry of Natural Resources will contribute, to the extent of its mandate, to the implementation of Ontario's Energy Security Policy, through its allocation of land and water to various users.

b. Objective

Ontario Government objectives(2) include:
(i) An increase in the proportion of Ontario's energy consumption provided from resources within the Province from 22.6 percent in 1979 to 37.5 percent by 1995.

---

(1). See Hazard Land, Section II-B-4-h

(2). The Ontario Government's position is outlined in the report ***Energy Security for the Eighties****, issued 1979, and in* ***Ontario Energy Review****, 2nd edition, issued March 1981.*

(ii) An increased reliance on renewable and recoverable resources and a decreased reliance on crude oil.

c. **Target**
By 1995 to increase the contribution provided by the Province's indigenous energy resources from the 1978 level of 22 percent to a level of 37.5 percent.

d. **Strategy**

- identifying as part of the analysis of resource potential, lands and waters with potential for providing energy;
- making land and water allocations giving suitable priority to energy needs in relation to other land-related needs, in a manner that reflects both the importance of energy supply related to other needs, and the resource potential of the land and water being considered; and,
- wherever feasible, not permanently committing lands and waters with significant potential for supplying energy to other uses that would preclude the use of these areas for energy production.

e. **Discussion**
In implementing the energy policy a number of resources of interest to this Ministry will be involved, including hydro-electric power, uranium, oil (including oil shales), gas, lignite, peat, solar energy and wood.

Land allocation for energy production will require a priority in relation to other allocations which suitably reflects both the relative importance of energy self-sufficiency and the resource potential of the resource being considered for allocation.

Providing energy may offer new opportunities for intensified resource management in two ways:

- increased access to some areas, especially in the North; and,
- utilizing otherwise unsuitable material such as cull or dead timber or logging residues.

Any proposed energy development on lands and waters important to this Ministry's programs will be carefully reviewed to avoid any undesirable environmental impacts.

In the Northwestern Planning Region, land and water needs for hydro-electric development, forest biomass production and the mining of peat and uranium will result in new demands on the land base.

(i) **Hydraulic Power** While hydraulic potential has largely been developed in Ontario, further benefits can be achieved through the development of suitable new sites and extensions to existing facilities.

Within the Northwestern Planning Region the most promising sites for new developments occur on the Little Jackfish River, where an additional average energy output of 66 megawatts is anticipated, and at Maynard Falls where a further 27 megawatts appears feasible. Alternative undeveloped sites from which substitution could be drawn occur at two points on the Pic River, with an estimated average energy output of 22 megawatts in total.

An extension to the existing generating station at Ear Falls, increasing average output there by 5 megawatts, appears feasible.

Further possibilities exist for private developments utilizing sites of smaller hydraulic power potential (less than 2).

(ii) **Forest Waste** Within the last 10 years forest product wastes have been increasingly used to generate steam and electric power. There are currently several forest product plants in the Planning Region which utilise forest biomass for part of their energy requirements. These are located in Kenora, Dryden, Fort Frances, Atikokan, Thunder Bay, Longlac and Red Rock.

(iii) Peat Peat has long been used as a fuel for heating and power generation in some European countries, but it represents a new resource in Ontario. Recent studies place Canada first with the world's peat resources, with about 170 million hectares.(1) Of this an estimated 26 million hectares lies in Ontario.

A ranking of various areas in the Province for peat production potential based on various climatic factors placed the Rainy Lake - Kenora - Red Lake Region third in the Province behind Southern Ontario and the Sudbury area. Further terrain surveys will help delineate potential resource areas with a greater degree of confidence.

Once harvested and dried, peat may be used for domestic heating or for the thermal generation of electricity, process steam or direct heat. At present the Ministry of Natural Resources is involved in compiling and analysing data regarding the use of peat for energy in Ontario.

(iv) Other Sources Since it is the intention of the province to increase the use of nuclear fuel sources, uranium deposits in the Planning Region may gain increasing significance. Current exploration activities are focused on the following general areas: Greenwich Lake - Black Sturgeon River, Prairie Lake, Vermillion Bay, Favourable Lake and immediately north of Kenora. Further uranium potential exists in other parts of the Planning Region.

4. LANDS AND WATERS

The broad objective of the Lands and Waters Program is:

- to facilitate the orderly development and conservation of Ontario's land and water resources for continuous social and economic benefits for the people of Ontario; and,
- to prevent loss of life, and to minimize social disruption, property damage and loss of natural resource values from forest fires, floods, erosion, earth slippage and abandoned mines.

(i) Discussion Because the desired benefits must be continuous, the land and water required for this must be wisely managed. Ultimately, all life and human activity are dependent on land and water. To be effective, management of land and water must be an active force; it cannot be passive or merely reactive. Because these resources are basic, they must be managed in a truly comprehensive and integrated fashion. Since man is continually dependent on them, they must be managed for the very long term; their integrity must be maintained indefinitely. This is the intended meaning of the term "Conservation".

To a very great extent, the benefits of the lands and waters program accrue through other government programs including those within the Ministry of Natural Resources. For the most part the program operates by coordinating and monitoring the use of land and water by others.

The program advocates that resource management activities be conducted with due regard to the maintenance of overall environmental quality while minimizing adverse environmental impacts where these are unavoidable.

To implement the Lands and Waters Program the following strategies apply:

a. Geographical Referencing
A basis for a geographical referencing system will be developed and maintained. Such a system will include surveys, geographical referencing standards and the production of the Ontario Basic Maps. These activities will be major factors contributing to orderly development.

b. Crown Land
The lands and waters program has a custodianship responsibility for Crown land. This is carried out by asserting the Crown's proprietary interest concerning illegal occupations, by collecting acreage tax on mining lands and by maintaining up to date records of land grants. The government's position on land claims, such as those by native people will be clarified.

c. Multiple Use

- overall plans for multiple use of land and water will be developed, implemented and maintained;
- the paramount concern in land and water management is the allocation of land and water to ensure the most efficient use, and to best satisfy the needs of all government

---

*(1). Kivinen,E., and Pakarinen, P. "Peatland areas and the proportion of virgin peatland in different countries", in **Proceedings of The Sixth International Peat Congress.** Duluth, 1980. Quoted in Monenco Ontario Ltd. **Evaluation of the Potential of Peat in Ontario.** Ontario, MNR, Occasional Paper No. 7, 1981, P. 2.*

programs as well as the needs of the private sector compatible with government programs;

- the major strategy to ensure a high return on the Crown's land and water resources is multiple use. This means that two or more uses are accommodated within the same general area, perhaps concurrently or sequentially over time, and that single use areas are only designated where and when absolutely necessary;
- plans are long term commitments concerning the best uses of land and water. These will be prepared and maintained through an open planning process which includes public consultation;
- watersheds will be recognized as a major basic planning consideration when plans for land and water are prepared; and,
- plans for multiple use will be implemented directly on Crown land and will include, even in some instances, candidate parks. In such instances, identified park values will be protected. Uses and facilities which complement the achievement of objectives will be encouraged and uses which have no significant negative impact on the long term achievement of park objectives will be permitted with judicious controls. Uses which would conflict with long term achievement of park objectives will be prohibited.

d. Access Roads

Access roads will be developed and maintained consistent with approved Ministry policies, resource management plans and operating guidelines. To ensure overall coordination, multi-year plans for road access will be prepared for the province, the region and the districts. The following statements represent the basics of the Ministry's access road policy:

- access roads will be built to stimulate development and use of Ontario's natural resources;
- access roads will take into account tourism requirements for isolation, the needs of the mining and forest industries, outdoor recreation opportunities for residents of Ontario, and incidental general public, commercial and industrial transportation uses;
- access road plans will be developed on a long term basis and will be subject to public consultation;
- plans will take into account the requirements (if any) for public access;
- roads will be classified as permanent or temporary based on intended use;
- temporary roads will be rendered inoperative when intended uses are fulfilled;
- access roads may be closed temporarily or seasonally to the public for resource management and/or public safety reasons; and,
- alignment of roads will be planned:
  - to avoid lake access where appropriate,
  - to provide controlled access, and,
  - to provide public access consistent with the intended purpose of the roads.

(i) **Discussion** All individual access road proposals will be subject to an alignment and impact review to ensure that:

- the need for the road is understood;
- some alternative routes have been explored;
- affected resource users in the area have an opportunity to contribute to the planning of the project;
- the selected route is aligned in such a way as to minimize its impact on existing resource users; and,
- the Ministry's intentions concerning the future status of the road, and possible use restriction are clearly understood.

While roads will generally be open to the public, the Ministry may choose to close roads under its jurisdiction for reasons such as:

- an emergency situation where public safety is in jeopardy;
- to prevent overuse of certain resources; or,
- an existing facility is placed in jeopardy due to unlimited public access.

Except in an emergency, road closure will not deny access to private property directly accessed by the road.

The District Manager will ensure that all proposed road plans are available for public review at the District office. The District Manager will also review pertinent road location/construction plans for the upcoming year with all affected tourist operators, the local Northern Ontario Tourist Outfitters' representatives and others. As a general guide, the Ministry of Natural Resources will attempt to ensure that all forest access roads are located at least 120 metres from the shoreline indicated by the District Manager.

There will be many situations where this will not be possible and in the event that proposed locations are not feasible, and in the event that alternative locations cannot be agreed upon, the District Manager will call a meeting of the parties involved, to discuss and resolve the differences.

e. Modified Management Areas
Modified management areas (MMA)will be designed to maintain or improve resource values such as:

- fish habitat;
- wildlife habitat;
- scenic areas or other recreation or tourism resources and establishments;
- special features such as cultural, historic, biological or earth science sites; and,
- fragile forest sites.

within a multiple use context. Land use activity within these areas will be designed so as to maintain and/or improve identified resource values.

The following statements represent the basics of the modified management area concept:

- as an initial position, modified management areas will be assumed to be necessary on all shorelands; and,
- modified management areas will be established on other areas as necessary.

The term "modified management area" replaces such terms as "forest reserve" and "buffer".

(i) General Modified management areas may be established to control any undertaking such as mining or recreation development. However, because forest management is such a major manipulator of the environment, these guidelines should always apply to forest management.

Modified management, in the case of forestry, should apply to all operating activities such as road building, stream crossings, cutting, skidding and scarifying. Depending on local conditions, the prescription for forest management could provide for a broad range of utilization levels. Thus cutting could be permitted in some areas and not in others. There are a variety of cutting methods that can be used, however, there is no recommended best method.

(ii) Shorelands Because there is a keen competition for shorelands for such uses as forestry, fish and wildlife habitat and recreation, it should be assumed, as an initial position, that a 120 metre MMA is recognized on all shorelands. The dimensions of this area may be altered as necessary to suit particular circumstances. Where it is determined that an MMA is not required, the reason will be documented and filed with the appropriate forest management plan.

The MMA on shorelands should normally be managed by a two zone concept where the inner zone, next to the water, is a zone of minimal disturbance. The outer zone should be an area of more general use, however, certain aspects of management will have to be carefully controlled. The extent of each zone will vary with local conditions such as topography and soil material.

The suggested width of the minimal disturbance zone is as follows:

Shore Slope in percent	Width of Minimal Distrubance Zone
0	15 metres
10	30 metres
20	40 metres
30	50 metres
40	60 metres

The minimal disturbance zone could, in some cases, be an area where forest cutting is not permitted, but in some cases modified forest cutting could occur. However, roads, which are considered a major disturbance, should not be built in the minimal disturbance zone.

Because roads can cause major losses of fish habitat, a set of guidelines for road construction will be attached to all work permits related to the shoreland area. Special reference should be made to stream crossings.

Because lake trout are relatively rare and sensitive to disturbance, very special attention will be given to protection of their habitat. To protect lake trout habitat, it may be necessary to modify management practices beyond the immediate shoreland area. Some management practices may have to be modified throughout the entire watershed around the trout lakes.

Sensitive features of other fish habitat such as walleye spawning areas, must also receive special protection.

(iii) Other Areas MMA's may be identified, planned and managed for other program concerns as necessary:

- Wildlife: Areas for wildlife must include habitat of endangered species and may include deer and moose habitat or other special wildlife habitat such as heronies.
- Scenic Resources: Areas for the maintenance or improvement of scenery may be identified and managed. For example, areas along certain highways and designated trails may be identified as an MMA. However, it will not normally be acceptable to designate extensive areas of no forest cutting for this purpose. While it is recognized that it is desirable to leave some areas uncut, it is also recognized that a well planned forest harvest can result in a varied and pleasing landscape.
- Other recreation or tourism resources and establishments: Where it is in the public interests to do so, an MMA may be identified and managed to protect particular recreation or tourism resources and establishments. The extent of the no cut portions of such an area would have to be related to the direct and indirect benefits that would accrue to the people of Ontario from such protection. Each case must be judged on its own merits.
- Special features such as cultural and historic sites: MMA's may be identified and managed to protect those features which require protection.

(iv) Responsibility The identification and management of MMA's will be the responsibility of the Ministry of Natural Resources who will ensure:

- that a management prescription is prepared for each MMA and that all MNR program concerns are given consideration;
- that private sector interests, such as cottagers and special interest groups are consulted and kept informed as necessary;
- that suitable records are kept of MMA's, their prescription and their treatments; and,
- that suitable management controls are in place and implemented so that MMA's are managed according to the MMA prescription.

f. Crown Land Disposition

Crown land will be made available for development and to encourage private initiatives on Crown land.

This will be achieved by ensuring:

- that dispositions[1] are consistent with existing development plans, and meet the requirements of other agencies and ministries;
- that any Crown land disposition in a planning area will be consistent with the policies of the official plan and zoning by-law where such exists;
- that lands are developed or put to use without delay for the specific purpose for which they were granted; and,
- that lands are disposed of at prices or rents which represent a market value monetary return to the people of Ontario.

(i) Discussion Land will be made available through a variety of means, including sales and leases. While the traditional reasons for such land disposal have been largely for cottages and lodges, the potential scope for future disposals are many and varied. Specific examples of how this strategy will be implemented are:

Cottaging A variety of cottage lots from Crown land will be made available to meet that portion of the Ontario resident demand not supplied by the private sector.

The price of Crown lots will include the associated service costs such as surveying. In addition, the acquisition of a Crown lot will require ongoing commitment by lot owners for maintenance of associated facilities such as access roads and waste disposal sites.

In some districts with the Planning Region an excess of lots exists, in others there may be shortages of certain types. In areas of shortage, smaller lakes and rivers will be assessed to determine their capability to support cottaging, however demand in some districts will probably have to be met in other districts.

Cottage lots will be made available, from Crown land, to meet a portion of the Ontario resident demand not supplied by the private sector. A target of 2,250 cottage lots by the year 2000 has been set for the Thunder Bay District.

Lake plans are a prerequisite to Crown land cottage development in order to ensure that proposed developments will not reduce water quality below a level acceptable for recreational purposes and the maintenance of healthy, natural fish communities.

---

(1). The term "disposition" refers to the conveying, by the Crown, of various types of leasehold or freehold land rights to others.

purposes and the maintenance of healthy, natural fish communities.

Regional policy requires that special consideration will be given to lake trout lakes. At present no development is permitted on good quality lake trout lakes, with varying degrees of development allowed on other lakes depending on their classification.

Resources Extraction Withdrawals of mining rights on Crown land will be held to the absolute minimum so that exploration and mining development can be encouraged on the broadest Crown land base available. Withdrawal of productive forest land from forest management will also be kept to a minimum.

Municipalities In organized municipalities, the Ministry of Natural Resources will make public land available for residential and associated uses of such land as approved in an official plan or zoning by-law. Where an official plan or zoning by-law is not in place, the approval of the Ministry of Municipal Affairs and Housing and other ministries will be required.

In unorganized areas, the Ministry of Natural Resources will dispose of land for rural residential use based upon the policy and recommendation of the Ministry of Municipal Affairs and Housing. The Ministry of Natural Resources will not act as developer for residential subdivision in either municipalities or unorganized areas.

Other Activities Public land will also be made available for municipal, industrial, commercial, institutional, educational and government purposes where approval has been given by the appropriate level of government. Disposition for agriculture, commercial tourism and cottaging will be subject to their respective policies.

g. Crown Land Recreation

(i) Objectives

- to provide for recreational use by residents;
- to increase economic benefits derived from non-resident recreational use of Crown land; and,
- to minimize competition between resident users and non-resident of Ontario users in areas where the quality of experience is unsatisfactory.

(ii) Target Quantifiable Crown land recreation targets have not been developed.

(iii) Strategy Currently competition between resident and non-resident of Ontario recreationists using Crown land and its various resources is an important issue in Northern Ontario. In an attempt to deal with this issue, the following strategies have been identified within a Crown land recreation policy for Northern Ontario(1) and will be phased in generally.

- Crown lands will be zoned to either permit or prohibit Crown land camping by non-residents of Ontario; and,
- regulations will be passed related to the use of fish and wildlife resources by non-residents of Ontario;
- regulations may contain species and/or harvest limits; seasonal restrictions; and may also specify base of operations.(2)
- Crown land camping sites may be selected and leased to the private sector to be managed as campsites and made available for public use at market prices; and,
- all non-residents of Ontario who camp on Crown land will be required to pay a user fee.

(iv) Discussion Recently, problems relating to the use of recreational Crown land have become more pronounced. The prime reasons for this are increasing numbers of recreationists (both resident and non-resident) competing for resources (fish, game, natural areas) which are finite and, in many cases, are declining. Reasons for the decline are many but the most important include over-harvesting by recreationists and commercial users, and changes in habitat resulting from resource development activities.

---

(1) as defined in the Tourism Act

(2) Non-residents have a wide variety of options from which to select a base of operations while recreating on Crown land. They include the following categories:
(a) Provincial Park Campground - National Park Campground;
(b) Commercial campground, hotel, motel, cabin;
(c) Licenced tourist outfitting establishment including base and outpost camps;
(d) Cottages owned by the non-resident;
(e) Cottages owned by a friend or relative;
(f) Crown land - designated access points and undeveloped and undesignated areas;
(g) Crown land - under authorization of a land use permit.

As resources become, or appear to become, scarce, inevitably competition between users becomes more serious. Currently, competition between resident and non-resident recreationists using Crown land and its various resources is an important issue in Northern Ontario. Principle reasons for this becoming an issue are:

- increased demand by more people for fewers resources;
- the feeling by residents of Ontario that they should receive top priority in the allocation of such resources; and,
- the feeling that non-residents should be required to pay for the relatively high quality of resources experience Ontario's Crown lands provide and that they should contribute significantly to the tourism economy of the province.

Several studies have been conducted by the government with the objective being to identify the issues related to Crown land recreation and to provide solutions to the problems. Two key issues have been identified:

- the need to gain more economic benefit from non-resident recreational users; and,
- the need to reduce competition between resident and non-resident recreational users, particularly in situations where resource limitations are real or at least strongly perceived.

Basic principles which guide the Crown land recreation policy are:

- to provide for recreational use by non-residents in order to derive economic benefits;
- to allocate scarce or less plentiful resources for non-resident use in such a way as to extract maximum economic benefits; and,
- to minimize competition between resident users and non-resident users in areas where either, because of limited resources or congestion, the quality of experience is unsatisfactory.

h. Hazard Lands

Hazard lands are lands having inherent environmental hazards such as flood or erosion susceptibility, instability or any other physical conditions which could pose a risk of loss of life, property damage and social disruption, if development were permitted.

The policy is that there should be no encroachment of structural development on hazard lands. While the Province has adopted a general principle of no development in the case of the flood plains, there are provisions for considering and accommodating exceptional circumstances. Relief from the strict application of the *Flood Plain Criteria*[1] for Ontario may be sought through (i) application of the two- zone, floodway-flood fringe concept, or (ii) in unique situations, with provincial approval, the application of the special policy area approach.

The hazard land policy will be implemented through (i) the Ministry's own land use planning activities, and (ii) participation in the input to, or review of other agencies plans. The latter is to ensure that appropriate development control mechanisms are applied to hazard lands, to restrict development and activities in such areas in a manner which will help to prevent loss of life and minimize property damage and social disruption.

Compatible land uses within a hazard area might include:

- open space for recreation and conservation purposes;
- agricultural uses such as cropland and grazing;
- nurseries, forestry and horticulture;
- wildlife management and environmental protection areas;
- design approved linear facilities such as roads, bridges, railways and hydro corridors; and,
- structural works and other appurtenances designed for the purpose of flood or erosion control.

Private development of hazard land owned by the Crown must be in conformity with this approach.

Where development is proposed on hazard lands under private ownership, the approval of the Ministry of Natural Resources may be required in addition to other agency approvals such as a conservation authority, the Ministry of Municipal Affairs and Housing and the local municipality.

Hazard lands and particularly flooding have become a concern in the Thunder Bay District in

---

(1) ***Flood Plain Criteria;*** *A policy statement of the Government of Ontario on Planning for Flood Plain Lands. 1982.*

the past decade. Significant flooding has occurred both within the City of Thunder Bay and the outlying areas.

Hazard lands have been mapped for most organized townships within the District since 1974. Within the City the Lakehead Region Conservation Authority (LRCA) has established engineered construction and fill limits for the McIntyre, Neebing and Kaministiquia Rivers and McVicar Creek. The LRCA has also undertaken a major channelization project for the Neebing-McIntyre River system which when completed should minimize flooding problems on these two river systems.

Monitoring of bank stability by the LRCA and the Ministry is also being done on the Kaministiquia River valley particularly along Victor Street within the City.

The Ministry is encouraging municipalities to undertake mapping of potential hazards utilizing the funding which is available through the Federal Provincial Flood Reduction Program. The Ministry will endeavour to continue to expand the mapping of hazards in unorganized areas and to develop plans for responses to emergency situations.

i. Water Management

Plans for water management will be prepared and implemented to protect life and property and to provide optimum overall benefits. Watersheds will be delineated for the purpose of planning the use of water resources.

Plans for water management will be coordinated with: (i) the Ministry's overall plans for multiple use of land and water that are prepared for the regions and districts; (ii) the plans of the conservation authorities; and (iii) the plans and programs of other ministries such as the Ministry of the Environment.

The hydro-electric potential of existing and future dam sites will be evaluated. This will be recognized as an important factor to be considered, together with others such as wildlife habitat, fish habitat and wetland values, when plans for water management are prepared.

The reduction of property damage and loss of life from flooding, erosion and associated hazards will be accomplished by a combination of measures including: the mapping of flood and erosion prone areas, the implementation of flood emergency contingency plans, the maintenance of a flood forecasting and warning system, the construction and maintenance of dams and by encouraging the planning and wise management of the Great Lakes shore zone.

The preparation of water management plans will include appropriate public consultation.

j. Fire Management

A new forest fire management policy for Ontario has been approved. This updated Policy does not recognize a two-zone protection concept as stated in the *Northwestern Ontario Strategic Land Use Plan*. The current policy is directed towards the Ministry's goal "...to PROTECT public lands and waters". The policy is that each and every fire occurence in Ontario will receive a response.

The basic principle of the forest fire management policy is that fire has always been a significant factor in the forests of Ontario and will continue to have an impact on people and their environment. Forest fire management is, therefore, an integral part of land and resource management.

While aiming towards this goal the policy takes into account two key realities with respect to fire. They are:

(i) Wildfires cannot be totally eliminated from Ontario forests, therefore fire management is based on the values being protected and on cost-effective operations. Where property and personal safety are involved, there will be an immediate response.

(ii) Forest fires are not confined to public lands, therefore, fire management is conditionally extended to all fire hazard lands of the Province irrespective of land ownership or jurisdiction.

5. AGRICULTURE

a. Objective

In conforming with the *Ontario Food Land Guidelines,*[1] the Ministry of Natural Resources will ensure that classes 1, 2, 3 and 4 soils, as defined in the *Canada Land Inventory, Soil Capability for Agriculture,*[2] will be identified as

---

(1) *Ministry of Agriculture and Food.* ***Food Land Guidelines.*** Government of Ontario, 1978.

(2) Department of the Environment. ***Soil Capability for Agriculture,*** *The Canada Land Inventory Report No. 2. 1965.*

agricultural lands and recognized as foodlands available for future food protection in accordance with an agreed to plan, implemented in cooperation with the Ontario Ministry of Agriculture and Food.

b. Strategy

- encouraging municipalities and other provincial agencies to endorse land use designations and severance policies which are compatible with agricultural use and are in conformity with the provincial Foodland Guidelines;
- encouraging the expansion of agricultural land base on private class 1, 2, 3 and 4 lands adjacent to existing agricultural communities;
- disposing of Crown land for agricultural use on an individual parcel basis, as the need arises, with the approval of the Ontario Ministry of Agriculture and Food; and,
- discouraging on class 1, 2, 3 and 4 Crown lands any disposition and subsequent use of land which would prevent future use for food production.

c. Discussion

Agriculture is not fully developed in many areas of the Planning Region because of climatic limitations, distance from major markets, the small local market and competitive disadvantages compared with other regions.

In 1975, there were 419 farms in the Thunder Bay District according to Canada census and income tax returns. The average net farm income was $2,072. Of the 419 operating farms, 404 reported off-farm incomes, which averaged $6,479.

The single most important agricultural enterprise in the District is dairying. Other primary agricultural products include beef, pork, lamb, eggs, forage crops, market gardening and potatoes.

The trend within the District as well as nationally, is toward decreasing farm numbers. However, even with the decline in the number of farmers, the volume of agricultural production has increased due to better farm management.

Although there is relatively little high capability farm land in the District, this does not mean agriculture is unimportant. All dairy farmers and several potato and beef farmers are full time farmers.

Agriculture capability class 1, 2, 3 and 4 lands have been recognized as agricultural land available for future food production. The mapping of agricultural lands is focused on the townships around Thunder Bay. The remainder of the District was considered to have such marginal potential that it did not warrant mapping.

The process of agricultural land classification must take into account not only lands presently in production, but lands with potential for the future. For the most part these potential agricultural lands are currently used for forest production and should continue in this use until required for agriculture.

C: resource policies

The statements in this section indicate the objectives and targets as they are expressed in the *NWSLUP* (May 1982) and what the Ministry of Natural Resources proposes to achieve by the year 2000 in the Thunder Bay District.

1. COMMERCIAL FUR

(i) Objective To promote the full utilization of the fur bearer resource consistent with humane trapping practices, the maintenance of healthy populations and species diversity, and to maximize the social and economic returns from this renewable resource.

(ii) Target For beaver the target is 8,000 harvested annually. The target is tested for beaver only as this species is being used as an indicator of potential to produce other fur-bearing animals. An effort will be made to increase other fur-bearers to the capability of the land.

(iii) Strategy

- managing the fur resource on a sustained yield basis through the control of harvest, and management of furbearer habitat;
- encouraging increased efficiency among trappers by providing information on the extent and location of underharvested species on their traplines;
- ensuring most of the Crown land base will remain available for fur production;
- setting beaver quotas based on up-to-date aerial beaver house surveys;
- reallocating the traplines of registered trappers who harvest considerably below their quota and fail to achieve any meaningful gains in harvesting efficiency to more efficient trappers;
- increasing harvest efficiencies, improving pelt quality, and promoting wide spread use of humane trapping techniques through fur harvest courses, fur management and conservation techniques and government regulations;
- encouraging the increased utilization of underharvested furbearers such as wolves;
- maintaining or enhancing the quality of furbearer habitats through forest management practices;
- encouraging the establishment of local trappers councils to increase professionalism in trapping;
- updating the District *Commercial Fur Management Plan* to be consistent with the *Land Use Guidelines* and to include a private land management strategy; and,
- promoting the production of commercial fur benefits from patented land through input to other agency plans.

(iv) Discussion The most significant furbearers in the District in terms of their economic return are beaver, marten, lynx, mink, otter and fisher.

The present beaver harvest in the District is below the permitted quota thus trappers will be encouraged by the Ministry to use the trapline resources more fully in keeping with permitted quotas. Preference will be given to those trappers who wish to harvest fully the resources available.

The variety and quality of furbearing species is greatly affected by an alteration in preferred habitat. By altering wildlife habitat, forestry operations may impact upon the fur harvest and the ability to meet the stated target. To overcome this problem, timber harvesting plans are reviewed and modified to enhance habitat and where possible to reduce impact.

The District through its strategy for managing commercial fur species will strive to meet the assigned target of an available annual harvest of 8,000 beaver.

2. FIRE MANAGEMENT

Although fire is not a land use itself, it can have a significant impact on land management. Just as land uses are affected by fire, they also can affect fire potential. Wildlife and prescribed fire can also modify the natural resource base and, therefore, its ability to deliver natural resource products.

(i) Objectives

- to prevent personal injury, loss of life and social disruption resulting from a forest fire;
- to minimize the negative impact of fire on public works, private property and the natural resources of Ontario; and,
- to utilize the natural benefits of fire in achieving Ministry objectives for land and resource management.

(ii) Target Targets for fire control and use in the District are set and dictated by the targets established in specific land and resource management plans and in accordance with the stated objectives.

(iii) Strategy The fire management program performs a support function that provides expert knowledge and specialized services in the matters of fire control and fire use to client groups within and outside the Ministry. Those services will be carried out by:

- protecting values at risk through measures that present the occurence of wildfires and control those wildfires that threaten values; and,
- using prescribed fire as an approved resource management technique.

The fire management program will be conducted within a comprehensive planning system and implemented in accordance with:

- area plans that prescribe the fire management objectives for the District; and,
- delivery plans that describe the administrative procedures and operating guides necessary to accomplish the fire management objectives set out in the area plans.

Every forest fire in the District will receive a response, and each response will be governed by:

- the predicted behaviour of the fire; and,
- the potential impact of the fire on persons, property and values.

The fire management program will be performed in a planned, safe and cost effective manner while ensuring that:

- legislated obligations are met;
- Ministry responsibilities are fulfilled; and,
- all land and resource management requirements, relative to fire, are met to the extent possible.

The fire management program will maintain its standards and momentum by:

- engaging modern research and systems support techniques;
- transferring available technology into practical applications; and,
- recognizing personnel as the prime component of the program.

(iv) Discussion In order to achieve the stated objectives and minimize the above concerns and impacts, the District progam will emphasize:

- administrating and enforcing the *Forest Fire Prevention Act;*
- developing fire prevention and control agreements with municipalities, railway companies, forest industries, and other resource users;
- ensuring an appropriate response to every wildfire;
- encouraging fire prevention on Crown and private lands through education and information dissemination; and,
- ensuring that development and resource extraction activities in forested areas are designed so as to minimize fire spread and impact.

The use of prescribed fire in the District will be continued and expanded.

The use of prescribed fire is a recognized management tool for:

- hazard reduction;
- site preparation;
- habitat improvement; and,
- training and development.

The District is embarking on a hazard reduction program that will continue to grow and expand.

The areas selected for prescribed fire will be as carefully chosen and monitored to ensure that the desired results and objectives are achieved.

The fire occurance history of the District for the past 20 years, by five year periods is as follows:

Years	No. of Fires	Hectares Burned
1963-67	458	2,622
1968-72	488	16,184
1973-77	626	5,015
1978-1982	441	158,772

The increase in fires from 1973-77 was a result of Province-wide drought conditions during the last four years of this period.

The major concerns relating to forest fires in the District are:

- the large number of railway fires experienced annually. The potential for large destructive fires is high on the agricultural land surrounding the City and on the timber resources adjacent to the railway right-of-way;
- the extensive areas of slash and logging cutovers lend themselves to large fires with severe fire behaviour. Also any prolonged periods of dry weather compound the hazard. The amount of Budworm damage is moderate with no large areas of concern at present; and,
- the area is prone to lightning fires which occur in remote and isolated areas. These fires cause a drain on equipment and manpower resources.

The major impact of fires in the District has been:

- the large disasterous fires of 1980 have caused timber companies to relocate, re-evaluate and change plans with respect to resource extraction; some trapping and hunting areas have been disrupted however these effects will not be long term; and,
- the large number of man-caused fires which occur from recreation, railway and other sources continue to drain equipment and manpower resources. These nuisance fires require attention that could be otherwise focused on lightning fires.

3. FISHERIES

a. General

(i) Broad Objective To protect, rehabilitate, enhance and maintain Ontario's fish communities and their environment to provide an optimum contribution of fish, fishing opportunities and associated benefits to society.

(ii) Strategy

- using available knowledge to the fullest to manage fisheries more effectively and reduce conflicting uses of the environment;
- maintaining and where necessary, rehabilitating aquatic environments;
- preventing overfishing by monitoring fish communities for signs of stress and adjusting permitted harvests accordingly;
- allocating the allowable harvest of the fisheries resource among user group to provide the optimum mix of benefits, based on an objective and careful examination of all relevant biological, social and economic factors to ensure that optimum benefits accrue to the residents of Ontario and that a healthy, balanced fish community is maintained;
- developing an expanded knowledge base through the collection and analysis of resource inventory surveys;
- by monitoring the impact of experimental management programs;
- encouraging public awareness of the issues involved in fisheries management and developing mechanisms for public involvement in management decision-making;
- enforcing current fisheries regulations consistently, equitably and effectively while ensuring that both anglers and commercial fishermen participate in cooperative management and adhere to their catch limits, and quotas in order to protect the fish stocks and guarantee their perpetuation for the future; and,
- protecting the fisheries resource of the Great Lakes by working with American jurisdictions to ensure that balanced harvest of fish stock are assured and management strategies are compatible.

(iii) Discussion The fisheries resource provides a number of benefits to society, including the provision of food, employment, recreational opportunities and nature appreciation. In recent years, however, this resource has come under stress as a result of a combination of factors which include pollution, overfishing, the invasion of new species, an inadequate knowledge base and a general lack of public awareness of the problems. Management options are being developed to redress the decline in fish stocks and fishing opportunities and to restore the quality of the aquatic environment.

b. Sport Fishing Policy

(i) Objective To meet the demand for sport fishing consistent with the limits of an optimum sustainable yield. The anticipated Regional angling demand in the year 2000 is 3.8 million angler-days at an angler satisfaction level of 1 or 2 kgs. per angler-day depending on the area. This translates to 6.8 million kgs. of fish.

(ii) Target The District contribution to the Regional objective is to meet the anticipated angling demand in the year 2000 of 700,000 angler-days at an angler satisfaction level of 1 kilogram per angler day. This translates to 700,000 kgs. of fish/year.

(iii) Strategy While the theoretical estimated supply is below the target, it is felt that the target can be achieved because current theory is conservative in its estimates of the allowable yield of preferred sport species and some demand can be met by encouraging angling for non-preferred species.

Acceptance of this target is also based on the premise that through good resource management, Thunder Bay District can improve its yield. Such resource management will be coordinated in a *District Fisheries Management Plan* which will be written to implement the *Land Use Guidelines*. This management plan will include the following:

- use existing knowledge and guidelines to maintain fish populations and habitat;
- develop an expanded knowledge base through research data analysis, resource inventories and maintaining programs in order to understand impacts and management techniques;
- prevent overharvesting in order to maintain brood stock;
- protect fisheries habitat from the impairment of spawning beds through sedimentation or the reduction in oxygen levels by nutrient loading or organic matter deposition;
- monitor water quality for possible pollution from acid rain and other contaminants;
- rehabilitate existing degraded fish habitat and develop extensions of existing fish habitat in order to increase supply through natural spawning (this will have particular importance in near urban areas where adjacent land use impacts should be reduced, and high angling demands can be supplied);
- prevent over fishing of existing supplies through monitoring fish communities for signs of stress and adjusting permitted harvest levels accordingly;
- introduce walleye, brook trout and other species into "barren" habitats that exist as pockets throughout the District;
- encourage the use of under-utilized species (i.e. northern pike) through angler education, harvest limits and season lengths;
- redistribute demands to less stressed supply areas through control of access, plus season closures on stressed waters;
- enforce current fisheries regulations consistently, equitably and effectively;
- develop lake plans prior to Crown land disposition for cottages or tourism uses in order to assess the impact of development on water quality, harvest spawning beds and other fishery concerns; and,
- develop specific lake fisheries management plans prescribed in the *District Fisheries Management Plan* to achieve the District objectives and implement these strategies.

(iv) Discussion Walleye and lake trout are the most popular sport fish in Thunder Bay District. Increased production of these species will be sought through habitat protection and rehabilitation where necessary and by intensified management of spawning areas. Other species including rainbow trout, brook trout, salmon, whitefish, pike, bass, muskellunge and perch will also be managed to maintain their contribution to the sport fishery. Further, the use of species presently under-utilized will be encouraged. Lake trout is a highly prized game fish and will receive special consideration.

The harvest target is based on projections of demand to the year 2000. The Ontario angler surveys conducted in 1970 and 1980 by the Ministry and a 1979 Crown land recreation survey indicated that the current utilization in Thunder Bay District is estimated to be 642,000 user days. Projecting an 8 percent increase in demand to the year 2000, yields an estimated demand of 700,000 user days or 700,000 kgs./year at the target quality standard.

The theoretical recreational fishing potential yield for Thunder Bay is 585,000 kilograms/year. This is based on weighted morphoedaphic index (MEI) calculations considering proportioning of the yield estimates according to current theory.

Although it appears that there is a variance between the harvest target and the theoretical estimated supply, efforts will be made by the District to meet the angler demand by intensive resource management practices.

c. Lake Trout Policy

(i) Objective To provide for the maintenance, protection and enhancement of lake trout populations, and to provide recreational angling opportunities to the general public for this species, based on an optimum sustainable yield.

(ii) Target To produce 0.25 - 0.75 kilograms of lake trout per hectare per year from all lake trout waters.

(iii) Strategy There is a need for comprehensive long-range lake trout management. This will be done within the context of a *District Fisheries Management Plan* and will include the following strategies:

- continued research and identification of lake trout lakes;
- identification of prime lake trout waters for special management and protection;
- habitat protection will be directed by both the Modified Management Area and the Access Roads Policies;
- monitoring lake trout for stresses due to acid rain or other contaminants;
- monitoring of lake trout lakes for stresses due to winter angling or over harvesting and adjusting harvest controls accordingly;
- rehabilitation of degraded lake trout fisheries; specifically Lake Superior and major inland lake trout lakes; and,
- develop new management guidelines to protect lake trout habitat and populations.

(iv) Discussion Lake trout are a slow growing, late maturing species highly susceptible to overexploitation. The typical lake trout habitat of cold, clear, well oxygenated water is ecologically fragile, and care must be taken to avoid impacts which would detrimentally affect water quality.

Lake trout lakes in the District are evaluated and classified for management purposes according to the level of protection required.

There are approximately 90 known lake trout lakes in the District. This is less than 0.1 percent of the District lakes. Seventy-five (75) of these have been identified as being "prime" meaning that lake trout is an important component of the fish community in those lakes and management will be directed at maintaining this species.

Many of the major lake trout lakes are being depleted through over-fishing. Increased access to all portions of the District is placing demands on all the District's trout waters. Rehabilitation of the lake trout in Lake Superior has been encouraging and is expected to increase the District's lake trout productivity.

d. Commercial Fishing Policy

(i) Objective To encourge the harvest of commercial fish when it is biologically and economically feasible.

(ii) Target The target for Thunder Bay District is 1,601,000 kgs. annual harvest. This target has been developed considering the existing quotas for some species on Lake Superior and a portion of the calculated yield for other species and areas.

(iii) Strategy In order to meet the commercial fishing target the *District Fisheries Management Plan* will address the following:

- encourage full utilization of allocated fish species through quota adjustments between licences;
- continue research to ensure accurate quotas based on historic catch data, proportioning of the MEI determined potential yield, plus monitoring of commercial fish communities for signs of stress;
- use available knowledge and guidelines to maintain fish habitats and populations;
- redirect demand to waters capable of sustaining additional commercial harvesting;
- enforce current fisheries regulations consistently, equitably and effectively;
- set quotas and regulations to promote a sustained yield of commercial fish from commercially fished waters;
- protect fishery habitats from degradation and rehabilitate degraded habitats in order to increase sustainable yields from natural spawning;
- enhance fish community stability through balanced harvesting;
- document harvests and other pertinent catch and effort statistics by commercial fishermen as a major source of information to improve the understanding of fish population dynamics and hence contribute to fisheries management;
- implement the *Lake Superior Fisheries Tactical Plan* through the *District Fisheries Management Plan* to coordinate fishery management and operation work;
- develop lake plans prior to Crown land disposition for cottages or tourism uses which consider the impact of development on water quality, harvest, spawning beds and other fishing concerns; and,
- develop fishery management plans for lakes specified in the *District Fisheries Management Plan* in order to meet the District objective of 1,601,000 kgs. annual harvest.

(iv) Discussion Commercial fish production in the District averaged 1,166,000 kilograms per year valued at $609,000 for the years 1975 through 1980.

The target for commercial fish production for Thunder Bay District is 1,601,000 kgs. per year. The portion supplied from Lake Superior is 1,515,000 kilograms. The balance (86,000 kilograms) is expected to be achieved by harvesting non-recreational species such as lake whitefish, suckers and ling from inland lakes.

The Lake Superior harvest is dominated by lake herring. In the fall, this species moves into Thunder Bay and Black Bay from the main body of the lake to spawn. During this time, intensive commercial fishing occurs and the majority of the herring harvest is realized in a two (2) month period.

The target for Lake Superior has been developed in two parts. For lake herring, lake whitefish, deepwater chub and yellow perch, detailed estimates of potential production were made as part of the implementation of a quota by an individual licence system in 1981. For these species the potential is 1,464,000 kilograms. This projected level of production was based upon the application of the best available theory since there was a reasonable amount of data available about these species. For other species, such as lake trout, smelt and salmon, the portion available to the commercial fishery was calculated to be 51,000 kilograms per year. This estimate is based on an allocation of 50 percent of the production potential for these species to the commercial fishery and the balance to the angling fishery.

The other noteworthy species taken by commercial fishermen in Lake Superior is lake trout. This highly valued species has been the subject of intense management for over two decades to rebuild the once abundant stocks that were decimated by the sea lamprey and by overharvesting. This effort appears to be achieving results as numerous indicators all point toward increasing numbers of naturally reproduced lake trout being present in many areas where they have not existed for many years.

The present commercial quota on lake trout is small and restricted to Lake Superior. It is only large enough to legitimize the incidental harvest of this species during the legal harvest of the lake herring and lake whitefish.

In the 1.5 percent of the commercial harvest that comes from inland water, about 75 percent is whitefish, with walleye and suckers making up the balance.

4. FORESTRY

(i) Objective

- to provide for a continuous contribution to the economy by the forest based industries and to provide for other uses of the forest through sound forest management practices;
- to ensure that a continuous supply of wood is available to meet the Ministry of Natural Resources' year 2000 target of wood volume required by the forest industry;
- to encourage the production of the maximum "value added" to the provincial economy from the industrial use of the forest resource by promoting as full and complete a utilization of the available forest resource (wood volume and land area) as is commercially possible; and,
- to aid in the achievement of the job creation target of 5000 jobs as stated in *Northwestern Ontario: A Strategy for Development.*

(ii) Target To meet the wood requirements of the forest industry in the Thunder Bay District by they year 2000.

The target is 1,250,000 cubic metres of conifer and 300,000 cubic metres of hardwood for the year 2000. However planning must provide sufficient flexibility and opportunity for revisions to accommodate the expected increase to between 1,250,000 to 1,500,000 cubic metres of conifer and between 300,000 to 400,000 cubic metres of hardwood.

(iii) Strategy The Crown production forest land base will be managed on a sustained yield basis to provide the required wood volumes for the established forest industry.

New and revised forest resource management plans when completed will provide a more accurate estimate of available timber supply, its location and how the resource will be utilized within the District. The forest resource planning system currently in place is considered complementary to the land use planning process as it recognizes the latter has set production levels for other forest land uses which are achievement objectives:

Any problems relative to conifer wood supplies will be dealt with through the application of three general strategies:

- increased emphasis on the full utilization of cut wood by the industry;
- the identification and protection of high value forest areas will be a top priority in the restructuring of the forest fire management strategy in Ontario;and,
- the feasibility of reallocating some wood supplies in Northern Ontario will be examined.

Specifics of the forest strategy include:

- increasing the present available forest land base of 1,507,000 hectares (ha) by reducing the area currently designated as non-operable through technological improvement in harvesting and regeneration, and through managing timber reserves;

- pursuing the fullest forest regeneration program on cutover and untreated lands as is technologically and economically possible in order to perpetuate the continuous supply of forest products;
- employing techniques of increased forest yield through genetic tree improvement for faster growth rates, more volume and better quantity and through pre-harvest treatments such as cleaning, thinning and fertilization; which will increase volume over a rotation and may shorten rotation periods;
- providing advice and/or assistance to encourage forest management on private lands (this is particularly important because of the high proportion of private land around the City of Thunder Bay);
- encouraging the increased industrial utilization of hardwoods and other under-utilized tree species as well as a much more complete utilization of preferred species, including the salvage of damaged wood, and reducing post-harvest residues;
- increasing fire, insect and disease management efforts in order to reduce anticipated losses of wood; and,
- ensuring that forest management and operating plans are in place, and are prepared within a framework of multiple forest uses.

In looking to the future, information on the forest land base must be continuously updated if changing conditions of the forests are to be accurately reflected in the level of estimated annual wood supply.

(iv) Discussion The District is divided into five management areas: Port Arthur, Fort William, Shebandowan, Graham (Brightsand) and Black Sturgeon. Seventy percent of the land is under timber company management and the remainder is under Crown management. The largest licencees operating in Thunder Bay District are Great Lakes Forest Products Ltd. and Abitibi-Price Inc.. Together their licences cover 66 percent of the District. Other major corporations include Buchanan Forest Products Ltd., MacMillan Bloedel Industries Ltd. and Kakabeka Timber Ltd..

There are 17 private land Woodlands Improvement Agreements in Thunder Bay District which augment the fibre harvests from Crown land.

Virtually all species are harvested. Conifer such as spruce, balsam and jack pine are most in demand while hardwood species such as poplar and birch are less in demand. A small amount of wood is imported from the United States.

This wood supports an extensive local forest products industry. In 1976 there were 41 primary wood-using industries in the District producing a variety of products, i.e. paper pulp, lumber, panelboards, railway ties, chips and pallets.

Approximately 1,483,000 ha. of production forest land is available to provide for the long-term viability of Thunder Bay District's forest industry. The District's annual available wood supply (from a slightly larger land base) is currently estimated to be 1,630,600 cubic metres of conifer and 982,400 cubic metres of hardwood. This annual available wood supply is anticipated to reduce to 1,211,000 cubic meters of conifer and 718,000 cubic metres of hardwood by the year 2000, following the planned removal of overmature timber volumes and adjusting for a smaller available production forest land base.

Although there exists a variance between the target (1,250,000 cubic metres) for conifer and an anticipated reduction of the annual available wood supply (1,211,000 cubic metres) by the year 2000, the District contends that the target can be achieved if such strategies as increased emphasis on the fuller utilizatin of cut wood by the industry and the identification and increased protection of high value forest areas are applied.

5. MINING

The overall intent of the mineral management policy is to provide for an optimum continuous contribution to the economy by mineral resource industries through orderly development and utilization of available mineral resources consistent with sound environmental practices.

a. Metallic and Non-Metallic Minerals

(i) Objective To encourage exploration for and development of, mineral resources of the Region.

(ii) Target Since the nature of mineral discovery is unpredictable and the demand for minerals is dictated by fluctuations in international trade, and by the private sector, the setting of production targets for minerals is not feasible. However, the figure of 3,000 new jobs, as stipulated in *Northwestern Ontario: A Strategy for Development* represents a target toward which to strive.

(iii) Strategy

- minimizing Crown land withdrawn from staking, particularly land with high or moderate mineral potential and assessing the impact on mineral production of each withdrawal;
- using available knowledge through plan input and review to encourage municipalities, other government agencies and the public to adopt land use policies which do not unnecessarily inhibit mining or mineral exploration;
- encouraging the accumulation of geoscientific data through field surveys; and by collecting, storing and disseminating up-to-date information pertinent to exploration and development;
- ensuring a good public image of mining is developed and maintained through good site rehabilitation;
- constructing future resource access roads which consider mineral potentil and which could serve the mining industry by accessing areas of high potential;
- implementing Ministry assistance and incentive programs to facilitate mineral exploration and development;
- encouraging the processing of minerals in the District; and,
- allowing mineral exploration under controlled conditions in some candidates recommended for park status.

(iv) Discussion The concept outlined in the *Land Use Guidelines* has minimal impact on areas available for mineral exploration or development. An average of 98 percent of the District mining land base remains available for mineral exploration or development (283,358 ha. of high potential, 881,295 ha. of moderate potential, 1,684,349 ha. of low potential and 148,000 ha. of unknown potential).

The *Thunder Bay District Background Information Report* identifies those areas of high and moderate potential where the geological conditions are most favourable for the discovery of viable mineral deposits. Other areas are of lower potential, or of unknown potential where data are lacking. The possibility of finding significant mineral deposits in these areas cannot be ruled out. As more detailed geological knowledge becomes available, the maps will be refined accordingly.

Almost 66 percent of the District is assessed as low mineral potential, with only 5.6 percent of the District having high potential. Areas of highest potential are the Early Precambrian metavolcanic rocks of the green stone belts. Several belts run across the District but the areas of current interest are Shebandowan, Burchell and Moss Lakes, the Dawson Road Lots and the southwest and east ends of the District. Copper, lead, zinc, nickel and gold occurrences are receiving the most attention.

In the Sibley area, several silver deposits have warranted recent re-examination and a number of companies are actively exploring for uranium. The area also produces all of the Province's amethyst.

Problems facing the mining industry and which make it difficult to achieve the objective are the fact that mineral resource development is dependent on factors beyond Government control, and thus extend beyond the scope of the *Land Use Guidelines*. Factors such as fluctuating prices, adverse economic conditions which inhibit investment, federal taxation and unpredictable national and international trade-market conditions.

Some of these can be off-set by improved geoscientific data to encourage efficient and effective exploration, reduced withdrawals of areas from the land base available for staking and exploration, minimization of surface developments which interfere with mineral development, improved public perception of mining as a "clean" land use, minimization of constraints and conditions that increase development costs, and improved access.

b. Mineral Aggregate Policy

(i) Objective The objective for mineral aggregate production is to meet anticipated future demand with minimal disturbance to natural and cultural resources and the social environment.

(ii) Target A target has not been set for mineral aggregate production since a detailed resource inventory and analysis for the Region is not yet available.

(iii) Strategy The objective will be achieved by identifying areas of significant mineral aggregate potential and maintaining that potential for the future by encouraging compatible uses which would not preclude exploration and extraction activities.

(iv) Discussion Mineral aggregates, that is, sand, gravel and crushed stone, provide the bulk of the raw materials essential to the construction industry. Total demand for mineral aggregate in the District over the next 23 years is estimated to range from 116.9 to 133.9 million tonnes (128.8 - 147.6 million tons). Since nearly all the mineral aggregate uses in the area is provided by sand and gravel deposits, it has been assumed that these deposits will meet 95 - 98 percent of all the aggregate consumed. Crushed bedrock has the potential to supply an additional 11.8 billion tons of aggregate, but due to development costs this resource will not be fully utilized until sand and gravel sources are exhausted. As a critical, non-renewable resource, the protection of mineral aggregate is a significant item in Ministry programs.

In order to ensure adequate future supplies of mineral aggregate at a reasonable cost, the District will strive to provide the best available aggregate geology information. In this regard, the *Background Information Report* indicates the main areas of significant mineral aggregate potential, where most of the future aggregate supplies can be expected to be found. The *Land Use Guidelines* place minimal constraints on the land base available for aggregate extraction. The net areas available are 159,863 ha. of high potential and 132,429 ha. of moderate potential land. This is an average of 99 percent of the total available aggregate land base.

These figures do not consider the quality of the material, access, or proximity to markets. These are factors which greatly influence exploration and extraction. For example, because of the high cost of transportation of such a bulk commodity, deposits occurring close to transportation corridors and demand centres, such as communities, take on particular significance.

A primary thrust is the identification of critical areas in the local planning process. Through the plan input and review process, municipalities, other government agencies and the public will be encouraged to adopt policies which safeguard future aggregate resources and avoid land use conflicts which preclude expansion and/or utilization of existing pits.

A primary consideration with respect to the land use planning process is maintenance of future options. Effectively, the Ministry is not seeking designation of large areas as "aggregate extraction". Rather, it is seeking where possible designations such as agriculture and forestry, which provide for ongoing uses without closing the door on the future. It does, however, wish to suggest, within areas of high and moderate aggregate potential, no designations such as estate residential which limit future options.

It appears that many of the present aggregate operators have sufficient resources within existing pits or planned pit sites to meet aggregate demand for the next 15-20 years. This, of course, assumes that production and consumption rates of recent years will continue. To facilitate development of aggregate reserves, local municipalities will be encouraged to adopt special approval procedures for wayside pits and quarries without the need to amend official plans and zoning by-laws.

Land use conflicts involving aggregate extraction are usually of a site specific nature and may be resolved by applying suitable operating criteria, including adequate buffering and screening, and by rehabilitation of the site after use.

Rehabilitation of land after extraction is required to restore the land to its former use, or to a subsequent use compatible with the surroundings of the site. Where an extraction operation will affect a large area of land, progressive rehabilitation is expected.

c. Peat

(i) Objective To identify significant areas of peat and maintain their availability for exploration and possible future extraction.

(ii) Target There is no specific target assigned for peat production.

(iii) Strategy For development as a major energy source a peat bog or bogs must be of sufficient size to provide enough material to fuel a heat or power plant over a prolonged period of time. Also, the peatland should be fairly accessible and situated close to where the power will be consumed. In the long term, peat electrical generating facilities may be developed in the more inaccessible northern areas.

However, until mining becomes an economically viable activity there are no specific land requirements. Accessible peatland areas of large size, especially where situated close to communities or otherwise easily accessible, will be assessed in the normal planning process for their possible requirement for future energy use.

Development, dispositions and uses which would inhibit or prevent the extraction or management of peat reserves will be discouraged.

Private industry is encouraged to survey and assess peatlands to establish the ability of individual deposits to support commercial operations. Such work will be done under exploratory licences.

(iv) Discussion In Thunder Bay District, areas of high peat potential occur in Conacher, Fallis, Gibbard, Stedman, Trewartha and Meinzinger Townships.

At the present time, peat moss is harvested and process in Northwestern Ontio for horticultural purposes. However, current trends in the energy field suggest that peat may become a viable energy source in the near future.

Current policies indicate that studies of peat potential will take place over the next few years to inventory resources and examine the market ability of peat as an energy source.

6. PROVINCIAL PARKS

(i) Goal and Objective To provide a variety of outdoor recreation opportunities, and to protect provincially significant natural, cultural and recreational environments in a system of provincial parks.

- Protection Objective: To protect provincially significant elements of the natural and cultural landscape of Ontario.
- Recreation Objective: To provide provincial park outdoor recreation opportunities ranging from high-intensity day-use to low-intensity wilderness experiences.
- Heritage Appreciation Objective: To provide opportunities for exploration and appreciation of the outdoor natural and cultural heritage of Ontario.
- Tourism Objective: To provide Ontario's residents and out-of-province visitors with opportunities to discover and experience the distinctive regions of the Province.

(ii) Targets Targets for the park system have been developed in association with each of the four policy objectives. These targets express the level of service which the provincial park system should achieve if the objectives of the system are to be met. These targets, when translated into what is required in the Thunder Bay District are:

Protection/Heritage Appreciation

- Earth Science - To protect a system of Provincially significant, representative and special earth science features through representation of each unit of Ontario's earth science history. Nine (9) earth science environmental and landform process themes are presently represented within existing parks in the Thunder Bay District. Twenty-six (26) additional earth science environmental and landform process themes have been identified in candidate parks in the District.(1)
- Life Science - To protect a system of Provincially significant life science features through representation of biophysiographic units and vegetative site type. Existing parks in this District presently encompass five biophsiographic units as well as a number of specific life science features, (i.e. rare orchids). Seventeen (17) additional biophysiographic units have been identified in candidate parks within the District.(2)
- Historical Resources - To protect a system of Provincially significant, landscape-related, pre-historical and historical resources through representation of each theme and theme segment of Ontario history. Existing parks in the District include fourteen (14) theme and theme segments. Fourteen (14) additional theme and theme segments have been identified in candidate parks(3).

Recreation and Tourism

- Day Use — To provide 80,000 recreation and tourism day use opportunities within the Thunder Bay District by the year 2000.
- Car-Camping - To provide 182,000 recreation and tourism car camping opportunities in this District by the year 2000.
- Back Country Travel - To provide 14,000 non-wilderness back country travel opportunities in the Thunder Bay District by the year 2000

(iii) Strategy

- encouraging tourist use of provincial parks within the District and providing additional supply, supplementary to private sector supply, when necessary;
- monitoring the capacity in District provincial parks to meet the day use and camping targets;
- assessing the park system within the District to determine whether sufficient opportunities exist for the exploration and appre-

---

(1) *The numbers assigned to the District represent a portion of the Regional target identified in the* ***Report of the Task Force on Parks System Planning****, (September, .1981).*

(2) Ibid.

(3) Ibid.

ciation of the natural and cultural heritage.

- monitoring the capacity in the District provincial parks to provide wilderness and non-wilderness back country travel;
- conducting earth science, life science and cultural inventories, within and outside the provincial parks system; and,
- reviewing within the context of the district land use planning process, park candidates in order to determine whether a particular candidate:
  (i) should be recommended for park status,
  (ii) should be dropped from further consideration for park status; and,
  (iii) should be identified as an Area of Natural and Scientific Interest.(1)

(iv) Discussion

- Earth Science - In addition to the nine (9) earth science environmental and landform themes presently represented within existing parks in the Thunder Bay District, twenty-six (26) themes have been identified in candidate parks. Seventeen (17) occur in recommended candidates, seven (7) in Areas of Natural and Scientific Interest and two (2) in candidates that have been dropped.
- Life Science - Of a total of seventeen (17) additional biophysiographic units identified in the Thunder Bay District, ten (10) occur in recommended parks, four (4) in Areas of Natural and Scientific Interest and three (3) in candidates no longer being considered.
- Historical Resources - All fourteen (14) additional themes and theme segments occur in candidates being recommended for park status.
- Recreation and Tourism - existing Provincial Parks have the capability to provide 121,400 camper nights annually if all 523 campsites are fully utilized in addition to 36,550 day use opportunities annually. If developed fully they have the potential to supply, by the year 2000, an additional 136,900 camper nights and 24,400 day use opportunities annually. Demand for car. camping (182,000) and day use (80,000) opportunities to the year 2000 can be met by the District's existing parks.

Although potential exists to expand camping and day use facilities in existing parks, it is believed that this potential is not ideally located. Consequently other candidate areas are being recommended for park status to maintain future flexibility in meeting demand across a wider area of the District. As well, the provision of 14,000 non-wilderness back country travel opportunities will be met through candidate waterway areas being recommended for park status.

Although several earth science themes and life science units occur in candidate areas that have been dropped, future inventories within the Thunder Bay District will attempt to fulfill these objectives.

In addition to existing parks, the *Thunder Bay District Land Use Guidelines* have identified the status of candidate park areas in Table 1.

---

(1) Areas of Natural and Scientific Interest are areas of land and water containing natural landscapes or features which have been identified as having values related to protection, natural heritage appreciation, scientific study or education. They need not become "Nature Reserves" under the Provincial Parks Act, and their identification on private land does not indicate any intent of the Government to acquire land or to restrain or prevent any private use of land.

TABLE 1 STATUS OF CANDIDATE PARK AREAS

Candidate	Area (hectares)	Classification	Target Achievement	Recommendation
Arrowhead Peninsula	490	Nature Reserve	Life science feature representation	Park status
Little Greenwater	224	Nature Reserve	Earth science feature representation	Park status
Edward Is.	530	Nature Reserve	Earth science feature representation	Park status
Fraleigh Lk.	868	Nature Reserve	Life science feature representation	Park status
Kaiashk (Gull R.)	230	Nature Reserve	Earth science feature representation	Park status
Matawin R.	2,650	Nature Reserve	Life science feature representation	Park status
Pie Island Mesa	48	Nature Reserve	Earth & Life science feature representation	Park status
Pigeon R. Clay Plain	2,870	Nature Reserve	Earth & Life science feature representation	Park status
Whitefish Lake-West	1,150	Nature Reserve	Life science feature representation	Park status
White fish Lake-East	185	Nature Reserve	Life science feature representation	Park status
Kashabowie	2,064	Natural Environment	Earth & Life science feature representation 5,800 car-camping opportunities 2,450 day use opportunities	Park status
Middle Falls	965	Natural Environment	Earth & Life science feature representation 46,400 car-camping opportunities 7,100 day use opportunities	Park status
Silver Falls	2,406	Natural Environment	Earth science feature representation 21,800 car-camping opportunities 7,500 day use opportunities	Park status

Continued

Candidate	Area (hectares)	Classification	Target Achievement	Recommendation
Brightsand River	5,036	Waterway	Earth science feature representation 7,000 non-wilderness opportunities	Park status
Kopka R.	3,874	Waterway	Earth science feature representation 2,000 non-wilderness opportunities	Park status
LaVerendrye	5,000	Waterway	Earth science feature representation 5,000 non-wilderness opportunities	Park status
Arrow Lk.	445	Recreation	Life science feature representation 9,200 car-camping opportunities negligible day-use opportunities	Park status
Devon Rd. Mesa	90	Nature Reserve	Life science feature representation	Park status
Thompson Is.	171	Nature Reserve	Earth & Life science feature representation	Park status
Intola	24	n/a	Earth science feature representation	Area of Natural and Scientific Interest
Loon Lake	1	n/a	Earth science feature representation	Area of Natural and Scientific Interest
Mokoman	121	n/a	Earth science feature representation	Area of Natural and Scientific Interest
Nolalu	1	n/a	Earth science feature representation	Area of Natural and Scientific Interest
Pass Lake	1	n/a	Earth science feature representation	Area of Natural and Scientific Interest
Pearson Twp.	735	n/a	Life science feature representation	Area of Natural and Scientific Interest
Russell Point	37	n/a	Earth science feature representation	Area of Natural and Scientific Interest
Sitch Creek	187	n/a	Life science feature representation	Area of Natural and Scientific Interest
Slate River	36	n/a	Earth & Life feature representation	Area of Natural and Scientific Interest

Continued

Candidate	Area (hectares)	Classification	Target Achievement	Recommendation
Spar Is.	190	n/a	Earth & Life science feature representation	Area of Natural and Scientific Interest
Square Top Mountain	260	n/a	Life science feature representation	Area of Natural and Scientific Interest
Stanley Bur Oak	19	n/a	Life science feature representation	Area of Natural and Scientific Interest
Swamp Creek	1	n/a	Earth science feature representation	Area of Natural and Scientific Interest
Thunder Bay Lookout	1	n/a	Earth science feature representation	Area of Natural and Scientific Interest
Trewartha Township	3,065	n/a	Life science feature representation	Area of Natural and Scientific Interest
Inwood	440	n/a	n/a	Dropped Does not contribute to target achievement
Mooseland-Gull River	3,855	n/a	n/a	Dropped Kopka Waterway chosen as alternative.
Dickson's Quarry	1	n/a	n/a	Dropped Private land conflict.
McKenzie	250	n/a	n/a	Dropped. Private aggregate operations still ongoing
Pardee Twp.	242	n/a	n/a	Dropped Major private land conflict
Metionga	7,394	n/a	n/a	Dropped Major timber harvesting conflict
Mosquito Creek	12	n/a	n/a	Dropped Major private land use conflict
Thompson Lk.	124	n/a	n/a	Dropped Private land conflict

n/a - Not Applicable

As indicated, fifteen (15) Areas of Natural and Scientific Interest (ANSI) have been recommended in the document.

Areas of Natural and Scientific Interest are areas of land and water which may contribute to the achievement of the Ministry's protection objective, and complement the Provincial Park system by providing or encouraging protection for additional areas not regulated as provincial parks.

Where Areas of Natural and Scientific Interest occur on public land managed by the Ministry of Natural Resources, the Ministry will ensure that the land uses and activities which occur provide for the protection of the identified values. On private lands, the Ministry will, through cooperation with others, attempt to ensure that landowners are aware of significant features on their properties and seek the owner's cooperation in protecting such features. The identification of Areas of Natural and Scientific Interest on private land does not indicate any intent of the Ministry to acquire land or restrain any private use of land.

7. TOURISM

(i) Objective To provide from public lands and water and to encourage on other land a continuous contribution to the economy of Northwestern Ontario from tourism while ensuring that the sustaining capacity of the environment is not exceeded and that provisions are made for outdoor recreation for local use.

(ii) Strategy

- identifying recreational areas in the *Land Use Guidelines* where both the land base and the resources are attractive for and capable of supporting expansion of existing or new tourist facilities;
- identifying lakes which presently provide or have the potential to provide remote tourism opportunities. Management of land surrounding these lakes will be directed by both the modified management area and access roads policies;
- encouraging the development of new tourism facilities which do not rely on resource consumption such as fishing or hunting and the conversion of existing facilities from consumptive uses of Crown resources to less traditional recreational activities such as sailing, photography or skiing (particularly where fish and wildlife resources are over stressed);
- increasing dialogue with the Ministry of Tourism and Recreation concerning natural resource potential and public demands on those resources;
- attempting to locate new Crown land camping and recreational facilities away from areas where significant conflict with commercial tourism facilities may occur;
- preparing management plans for those specific lakes or areas identified in the *Land Use Guidelines* in order to identify potential sites for the expansion of commercial tourism; and,
- attempting to maintain at current levels or enhance the fish and wildlife resources in areas of existing tourism establishments.

(iii) Discussion In Thunder Bay District, tourism is primarily focused on hunting and fishing. The opportunity for expansion in the past was closely related to availability of fish and wildlife resources.

Existing facilities include 40 remote or semi-remote lodges with another 40 outpost camps which cater to a non-resident clientele. In addition to these facilities there are numerous motel-hotel facilities located in the City of Thunder Bay and along the major highways.

Cross-country and alpine skiing is a new focus for tourism, as existing hotels strive to extend the operating season into the winter months to augment their operations.

Existing private and municipal campgrounds supply 72 percent of the organized camping opportunities in the District. Generally, they offer extensive services (laundry, stores, electrical hook-up) to the camper.

Some of the problems facing tourist operators in Thunder Bay District include:

- increased road access throughout the District reduces the "remoteness" of existing and potential outpost camps;
- areas of heavy tourism use (Northern Light Lake, Lac des Mille Lacs) suffer from the demands for fish and wildlife resources thus reducing customer satisfaction;
- there is little residual sport angling potential available to support tourism expansion; and,
- there are conflicts between resident and non-resident tourism clientele and with those people who use Crown land and do not require the facilities of a tourist operator.

Many of these types of concerns will be addressed by the modified management area, access roads and Crown land recreation policies.

---

8. WILDLIFE

a. General

(i) Broad Objectives To provide sustained optimum cultural, social and economic benefits to the people of Ontario through the management, protection and rehabilitation of the wildlife resources in Ontario.

(ii) Strategy

- managing the Region's wildlife on a biologically sound basis;
- maintaining and, where possible, enhancing wildlife habitat through input into timber operating plans, land use plans and direct habitat modification;
- determining harvest targets on the basis of an optimum sustainable yield;
- giving Ontario residents priority in the allocation of hunting opportunities, while acknowledging the commitment to Native people's Treaty rights;
- providing opportunities for increased viewing of wildlife;
- identifying and protecting rare and endangered species of wildlife and their habitat;
- enforcing and encouraging the adherence to Ontario's legislation affecting wildlife, including hunting regulations; and
- improving our base of knowledge to more effectively manage wildlife.

(iii) Discussion Wildlife resources play a highly significant role in the lifestyle and economy of the Planning Region. They provide a source of recreation through hunting and nature appreciation, and represent a supplementary source of food for many people. Tourist related economic benefits are also substantial. Furthermore, trapping and the fur industry it sustains, represent a source of income for the Region.

Besides the management of huntable animals, the Ministry also has a responsibility for the protection of non-game species which inhabit the Planning Region. These include the blue heron, osprey, a variety of song birds, bald eagle, peregrine falcon, golden eagle, white pelican, eastern cougar and possibly the piping plover.

Successful wildlife production depends upon sound management programs aimed at the maintenance and improvement of suitable habitats in conjunction with appropriate harvest controls. The modified management area policy and the access roads policy will provide direction for the protection of wildlife resources.

To maintain or increase the quality of hunting opportunities presently existing in Northwestern Ontario, various management techniques will be required, dependent upon locally occurring conditions. Management options which may be utilized are: season restrictions, area specific licencing, control of hunter efficiency and hunter numbers, predator control and control of the age and sex structure of the harvest.

A system of wildlife management units is used to enable wildlife to be managed on the basis of ecological and socio-economic criteria. These units are used as the basic areas for data collection on factors affecting wildlife populations, development of management plans, programs and proposals, and recommendations for hunting seasons.

In previous years concern has been expressed by residents at the impact of non-residents on game availability. However, with the development of the Crown land recreation policy, special attention will be given to providing recreational opportunities for residents by minimizing competition with non-residents.

b. Moose

(i) Objective To protect and enhance the moose resource and to provide opportunities for recreation from moose for the continuous social and economic benefit of the people of Ontario.

(ii) Target To increase the moose population to 9,860 animals from which an annual harvest of 1,700 moose can be realized. The target for moose populations is based on the average moose population densities prior to the recent decline, and current densities in specific areas within the Region which have little hunting pressure. With proper harvest, predator control and suitable habitat, it is estimated that moose populations could be maintained at a density of .39 moose/km (1 moose/sq. mi.). This value represents target densities in the core portion of the moose range, with lower values in more northerly and southerly units. It must be appreciated that potential densities differ among management units because of differences in the quality of habitat and in the opportunity to improve it.

The potential harvest of moose has been determined by computer modelling and is estimated to approach 18 percent of the mid-winter population. In order to achieve this level of harvest, the following assumptions were made:

- that annual non-hunting mortality would be controlled in the 10-20 percent range;
- that the sex ratio of the adult herd would be 40 percent bulls and 60 percent cows;
- that habitat would be managed to produce a carrying capacity of 0.39 moose per sq. km.;
- the ratio of calves/adult cows would be 1.56 at birth, calves/yearling cows would be 0.30 at birth and calves/adult plus yearling cows prior to the hunt would be 0.81; and,
- that the harvest would be predominantly bulls and calves, with cows comprising not more than 20 percent of the harvest.

(iii) Strategy

- input into forest management practices such that habitat will be produced which is consistent with the *Standards and Guidelines for Moose Habitat Management*;
- limiting the harvest of moose in each Wildlife Management Unit until the population target is attained and regulating the sex and age structure of the harvest to establish the population structure required to attain the harvest target;
- controlling predators in problem areas through trapping or through direct predator control;
- improving the base of knowledge through population, habitat and harvest surveys and computer assisted data analysis;
- improving, where possible, enforcement efficiency and efforts;
- reducing the loss of recreational opportunity caused by wounding through improved hunter education and firearms proficiency training; and,
- producing a District moose management plan consistent with the *Land Use Guidelines*.

(iv) Discussion Over the past decade and a half there has been a significant decline in the moose population within the District. Overexploitation appears to be the major cause and the allowable harvest has been exceeded throughout much of the District, particularly in the more accessible areas. In addition to overharvest, there has been a reduction in the quality of habitat. Predation is considered to be a secondary, but contributing factor.

As a result, the population is depressed below the carrying capacity and currently is estimated at about 6,500 moose. From this population, 760 moose were harvested by 5,142 hunters in the fall of 1980, with 32,101 hunter days of recreation provided. These numbers represent a substantial reduction from previous years.

There are several major problems associated with moose management. In the past, the Ministry lacked the ability to control and distribute the harvest of moose in proportion to population densities. This, in conjunction with expanding road networks and reduced quality of habitat, has led to overharvest. Further, hunters and predators are competing for a finite resource. To ensure that predators do not consume the entire surplus production of moose it will be necessary to practice predator control. Similarly, the harvest by native peoples is without control and in some areas may contribute to a harvest which exceeds the sustainable yield.

The District through its strategy for moose management will strive to meet the assigned target of an available annual harvest of 1,700 animals.

c. Deer

(i) Objective To manage the deer population consistent with habitat capability, land use and the well being of the species and to provide economic and social benefit from opportunities for hunting and viewing.

(ii) Target To increase the deer population to 1,500 animals with an annual harvest of 150 deer.

For the purposes of estimating the capability of the District to meet the target it was necessary to make the following assumptions:

- that deer populations could be restored to and maintained at a population density equivalent to 3.0 deer/sq. km.;
- that most Crown and patent land would be available for deer production and harvest;
- that there will be full implementation to the deer program including selective harvest, increased and improved enforcement, selective predator control and improved habitat management;

- that the harvesting practices of Native peoples will not be detrimental to the herd;
- that winter severity will not be so extreme as to decimate the herd; and,
- that a ratio of greater than one wolf per 140 deer will prevent population growth.

(ii) Strategy

- input into forest management practices (plans) such that habitat will be produced, maintained or improved which is consistent with the *Standards and Guidelines for Deer Habitat Management*;
- encouraging the production of deer habitat on patent lands through education and providing technical assistance;
- regulating the harvest of anterless deers, consistent with the objectives for population growth and size;
- controlling predators in problem areas through trapping or through direct predator control;
- directing hunting pressure to those areas capable of sustaining increased harvests;
- improving where possible, enforcement efficiency and efforts;
- improving the base of knowledge, through population, habitat and harvest surveys and computer assisted data analysis;
- providing where practical, emergency deer management practices when winter severity threatens the herd; and,
- producing a District deer management plan consistent with the *Land Use Guidelines*.

(iv) Discussion The Thunder Bay District is located near the northern limit of the white-tailed deer range. As a result, deer population densities fluctuate significantly in response to winter severity and predation.

Deer hunting is a popular form of recreation and in 1980 an estimated 701 hunters harvested 64 deer while enjoying 4,907 hunter days in the field. Deer hunters contributed some $178,000 to the economy of the area.

Winter severity is a major problem affecting deer numbers.

The effect of climate is further aggravated by both poaching and predation. When herds are at low numbers, these factors reduce their ability to expand. They also reduce the opportunity available for legal hunting.

Timber harvesting practices are generally beneficial to deer when clearcut size is small and when cuts are dispersed among mature timber stands. Certain timber harvesting practices which result in large or poorly dispersed cuts are not compatible with optimal deer habitat management.

The District through its strategy for deer management will strive to meet the assigned target of an available annual harvest of 150 animals.

d. Black Bear

(i) Objective To manage the bear population consistent with habitat capability, land use and well being of the species and to provide economic and social benefits from opportunities for hunting and viewing.

(ii) Target The Thunder Bay District target is an annual harvest of 500 bear. For the purpose of setting the bear target for this District, the following assumptions were made, based on bear research conducted in Northeastern Ontario:

- bear population would be .16 bear/sq. km. in much of the Boreal Forest Region and .31 bear/sq. km. in the Great Lakes - St. Lawrence Forest Region;
- bear populations would decline if total annual mortality exceed 20 percent of the population;
- hunters could harvest 10 percent of the population annually without causing population decline; and,
- wildlife management units were classed in one of four density classes roughly based on the composition of the forest. These classes were .20 bear/sq. km., .15 bear/sq. km., .125 bear/sq. km. and .10 bear/sq. km.

(iii) Strategy

- maintenance of bear habitat as a secondary benefit of input into forest management practices to produce deer and moose habitat;
- improving our base of knowledge through study of the relationship of hunting pressure and harvest and the study of bear population dynamics and habitat needs;
- encouraging the harvest of bears in areas where they are a high nuisance factor;
- promoting black bear as a desirable big game hunting resource with desirable economic benefits to the local economy;
- developing appropriate management practices which sustain the District bear population and in some areas increase the bear population for recreation and commercial tourism benefits; and,

- by producing a District bear management plan consistent with the *Land Use Guidelines*.

(iv) Discussion Until very recently, bear in Ontario have been considered more of a nuisance animal than a big game species. Because their population sizes are very difficult to survey, no solid density information is available, and the estimated District population of 4,898 bears is based on values extrapolated from studies in other areas.

The interest in bear hunting has grown very rapidly in recent years. Harvest information, based on the sale of export permits to nonresidents, indicates a harvest exceeding 216 bears in the Thunder Bay District in 1981. This represents 4.4 percent of the estimated bear population. In addition to spring and fall hunting, bears may be killed as nuisance animals during the summer.

The District through its strategy for bear management will strive to meet the assigned target of an available annual harvest of 500 bear.

e. Small Game and Waterfowl

(i) Objective To meet the demand for hunting and viewing opportunities for waterfowl and small game and to increase the opportunities for recreational, economic and cultural benefits from waterfowl and small game resources.

(ii) Strategy

- perpetuating a variety of wildlife habitat types by maintaining an interspersion of vegetation types and age classes of forest through the forest management process;
- maintaining inventories of small game populations where feasible;
- improving information systems regarding population numbers;
- encouraging the protection of feeding and shelter habitat and nesting sites such as Mission Island Marsh; and,
- carrying out habitat protection or improvement programs designed to maintain and enhance populations.

(iii) Discussion Ruffed grouse, spruce grouse, sharptail grouse and varying (snowshoe) hares are the most abundant small game species in the District.

Small game populations exhibit regular fluctuations in density, commonly following a ten year cycle. Most data show that hunting is seldom a major factor limiting small game numbers and consequently little effort has been made to identify absolute population and harvest levels in this Region. However, hunting pressure tends to be concentrated along the road system and this factor inhibits greater utilization of these resources in less accessible areas.

The main waterfowl species which summer in the Thunder Bay District are mallard, black, ring-neck, goldeneye, blue and green-winged teal and merganser ducks. The marshes and other wetland support local populations of ducks but in general, breeding populations are stable and low in this area because of marginal habitat for duck production. The majority of the waterfowl hunting is directed toward those ducks migrating through the District.

Waterfowl are managed on the basis of flyway populations and continental conditions. It is not feasible to exclusively manage the waterfowl population within a District.

f. Non-Consumptive Uses

(i) Objectives

- to prevent additional species from becoming endangered or threatened;
- to improve the status of existing endangered or threatened species with the objective of removing them from the endangered species list;
- to maintain populations of all wildlife species (both non-game and game) at levels sufficient to:
  - provide opportunities for recreational enjoyment, aesthetic appreciation, scientific investigation and educational uses;
  - provide benefits from tourism;
  - ensure environmental quality and ecosystem integrity; and,
  - ensure the safety of the public.

(ii) Strategy

- protecting, conserving and managing all wildlife species (both non-game and game) on public and private lands, and to ensure the perpetuation of diverse high quality habitats;
- identifying wildlife species in the categories listed below and to protect or manage populations of these species if the best available scientific, social and economic data indicate that such action is necessary to achieve the above objectives. These categories include:

  - endangered, threatened or rare species; and,
  - populations of significant wildlife species (both non-game and game);
- working cooperatively with government agencies at the federal, provincial and municipal levels and with private landowners, developers and other members of the private sector to achieve the protection of all wildlife resources (both non-game and game);
- increasing non-government participation in the identification and management of wildlife, in particular endangered, threatened or rare species; and,
- providing extension services which promote an understanding of the value of wildlife resources (both non-game and game), and non-consumptive uses and which enhance social benefits and tourism.

(iii) Discussion Eagles, white pelicans and piping plovers are some of the species legally protected by the *Endangered Species Act* because they have suffered declines over much of North America. It is estimated that 40 pairs of endangered birds breed in this District (39 bald eagles, 1 goldeneye eagle) although an intensive inventory has not been completed. A very important portion of an adult bird's life centres around the nesting territory, consequently these species need protection of nesting habitat and freedom from disturbance during the breeding period.

Many species of non-game animals inhabit this District. Since most of these species are protected by law (*Migratory Bird Convention Act, Game and Fish Act*) or have little economic value, they are not exploited and therefore require little direct management effort. Ospreys and great blue herons are two species that although not protected as endangered species, are sensitive to certain types of disturbance and do require specific management. It is estimated that this District has 5 breeding pairs of osprey, 22 heron rookeries and 4 double crested cormorant colonies, although no intensive surveys have been conducted.

9. WILD RICE

(i) Broad Objective To provide sustained optimum social and economic benefits to the people of Ontario by stimulating the use and management of wild rice, recognizing its traditional significance and potential economic benefits to native people.

(ii) Objectives

- to provide a source of food for native people and other local residents;
- to allocate harvesting rights for personal use and commercial purposes, among all interested Ontario residents and corporations, consistent with the requirements of traditional users;
- to provide opportunities to increase the productive areas for cultivating wild rice and to enhance the quality and yields, particularly in natural waters;
- to stabilize annual production; and,
- to improve the overall economic return to harvesters, processors, marketers and others involved in the wild rice industry.

(iii) Target To increase the average annual harvest of wild rice in the Thunder Bay District by the year 2000 to 15,600 kgs./year.

(iv) Strategy

- allocating Crown land for wild rice production in order that:
  (i) the area commonly harvested by Indian people are reserved for them;
  (ii) opportunities for commercial use of the wild rice crop are optimized;
  (iii) personal use and recreational needs of residents are met; and,
  (iv) research requirements are met.
- protecting wild rice habitat in order to sustain a future production;
- supporting further research and educational programs, and providing technical advice for the benefit of the wild rice industry in Ontario and the District's local producers;
- encouraging the use of improved methods of cultivation and harvesting of wild rice in order to increase the yield per unit area, at the same time respecting the cultural significance to native people of traditional wild rice harvesting methods (this may consider mechanical harvesters, and water level controls);
- encouraging the processing of "green rice"(1) within Canada;
- permitting the planting of additional waterbodies or the development of wild rice paddies by private entrepreneurs, in areas which do not conflict with other resource uses or concerns and where biological condi-

---

(1). "green rice" refers to rice harvested from the plant before being dried and processed.

tions are suitable; and,

- preparing a District wild rice management plan to achieve the development and increased utilization of this resource to achieve the target.

(v) Discussion Natural wild rice beds exist on Whitefish, Koss, Armistice, Ricestalk, Kingswood, Rousseau and Bearpad Lakes and in Hurkett Cove on Lake Superior. Other areas thought to have potential to grown wild rice have been seeded.

Production in 1980 occurred on Whitefish, Ricestalk and Rousseau Lakes and on the Matawin River. This amounted to 9,141 kgs. Most of this harvest was taken by Indians using traditional harvesting methods.

Throughout the District there are 554 ha. of currently productive rice lands or beds that have potential. The estimated potential yield from these areas is 15,600 kgs./year.

10. SUMMARY OF TARGET ACHIEVEMENT

The following table summarizes the targets to be achieved in the Thunder Bay District to the year 2000. The figures have been rounded, recognizing that a finite degree of preciseness at this broad level of detail is not realistic. The targets reflect the mix of resource activities to be carried out within the District. Strategies indicating how these various targets can be achieved have been discussed previously in the resource policy section.

TABLE 2 SUMMARY OF TARGET ACHIEVEMENT

Program	District Targets (Year 2000)
Aggregate	n/a
Agriculture	Protect CLI Classes 1-4
Commercial Fishing	1,601,000 kgs/yr
Cottaging	2,250 cottage lots (year 2000)
Crown Land Recreation	n/a
Forestry:	
Conifer	1,250,000 NMm^3/yr
Hardwood	300,000 NMm^3/yr
Hunting:	
Moose	1,700
Deer	150
Bear	500
Mining	While no mining target was assigned to the District in excess of 98 percent of the high, moderate and low mineral potential Crown land remains available for exploration.
Peat	n/a
Provincial Parks	80,000 day use opportunities 182,000 car-camping opportunities 14,000 non-wilderness opportunities 17 life science biophysiographic units 26 earth science environmental and landform themes 14 historical themes and theme segments
Rural Residential	n/a
Sport Fishing	700,000 kgs/yr
Tourism	23 lakes identified for tourism
Trapping	8,000 beaver
Urban Development	n/a
Wild Rice Harvesting	15,600 kgs/yr

D: land use areas — guidelines

This portion of the document contains the land use policies for the individual areas of the planning area.

The planning area has been divided into 17 separate areas (refer to figure 2). Each is set apart from adjacent areas by the compatible activities which occur in them. The land use policy for each states which Ministry programs could operate on Crown land and what guidelines or conditions may apply. Where the Ministry would prefer not to see certain land uses take place on private land, these are noted under the guidelines. The rationale for the division of the planning area into the smaller areas is based on the premise that the activity or mix of activities in the area is significantly different from that in adjacent areas or is carried out under different conditions.

The format for presentation of each separate area consists of three (3) parts:

a. Area Description
This identifies the location of the area, the present use and level of development, major resource values, previous commitments (i.e. timber licences) and known problems and issues.

b. Land Use Intent
This gives the general role of the area and indicates where applicable the priority of uses permitted.

c. Land Use Activity
This lists the individual activities and developments on Crown land along with applicable guidelines. Ministry concerns about private land uses are noted where applicable.

All areas are numbered for identification purposes. The area activity form must be read in its entirety to determine the range of uses permitted and any applicable guidelines or conditions.

Where applicable, the primary and secondary uses are indicated. The term primary is used to convey the meaning of priority rather than intensity or abundance of use. Secondary means that a use is permitted so long as it does not conflict with the primary use of the area. Where there is a conflict in specific area, the primary use will normally take precedence. However, there will be instances where the secondary uses, e.g. tourism, will require specific considerations in a particular portion of the area. This will require the primary use, often forestry, to adhere to the special guidelines such as the access road and modified management area guidelines.

Where there is an increasing conflict with the primary use, site specific negotiations between the conflicting parties and the Ministry will attempt to resolve the conflict. Expansion of existing uses will generally be considered where it will not conflict with other uses. For example, Crown land might be made available for an individual resort to expand if its own land base is inadequate. In some areas, certain uses will not be permitted to expand, cottaging for example, but the existing cottage use would continue unaffected. In some instances, the Ministry may wish to phase out or alter existing uses. New or unanticipated uses may be permitted on Crown land subject to individual assessment.

Land uses on private land will generally not be objected to unless otherwise specified or restricted by legislation. The Ministry recognizes that its land use plans have no legal status and that land use control of private land rests with the Ministry of Municipal Affairs and Housing (MMAH) or designated municipalities. There will be occasions when the Ministry feels that certain land uses or proposed development on private land, while in conformity with municipal official planning documents, will have a negative impact on Ministry interests. In such situations, the Ministry will attempt to resolve the problem through discussions with the proponent, the municipality and MMAH. If the Ministry is not satisfied with the results of the negotiations they may consider taking further action under the procedures provided for by the *Planning Act* and in accordance with Ministry policy. Therefore, where the Ministry's land use guidelines indicate that it would prefer not to see certain land uses take place on private land, this is the position the Ministry will generally adopt when making input to official plans or zoning by-laws and when responding to the circulation for comment of private proposals by MMAH or the municipality. Such responses will be restricted to concerns within the Ministry mandate.

Additional operational and development guidelines such as those for roads and modified management areas, will be incorporated in resource management plans developed to guide activities within each area in order to prevent or reduce any conflict with other uses, especially the primary and secondary uses. Where land tenure documents are granted, they will contain similar conditions for the same purpose.

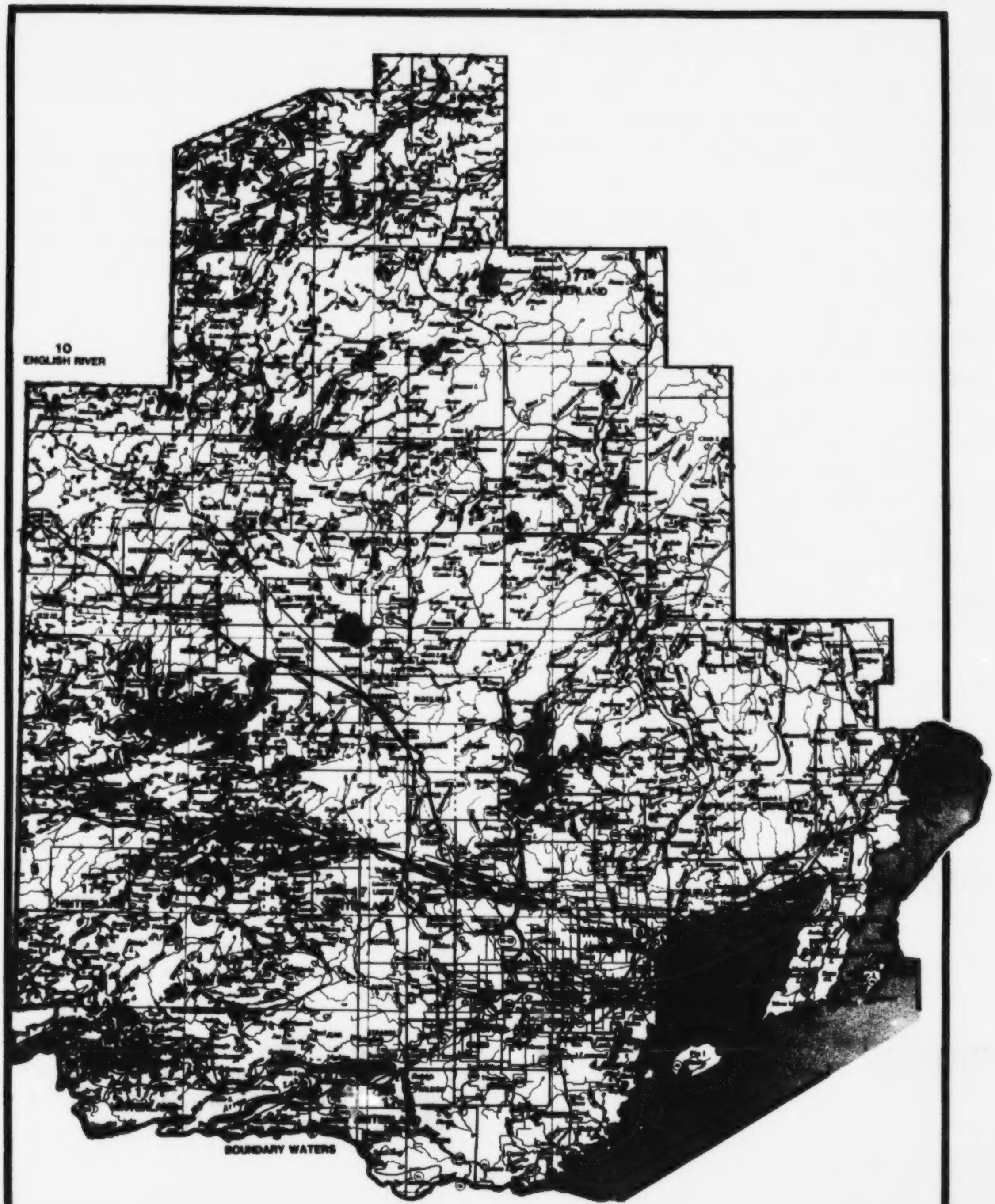
While Indian Reserve lands are not under Provincial control, it is anticipated that future development on Indian Reserves would be compatible with the intent established for the area adjacent to the Reserve.

Figure 2

THUNDER BAY DISTRICT

LEGEND

9 AREA NUMBER
— AREA BOUNDARY
△ EXISTING PARK
○ CANDIDATE AREAS RECOMMENDED FOR PARK STATUS
* AREAS OF NATURAL AND SCIENTIFIC INTEREST (ANSI)


10
ENGLISH RIVER
BOUNDARY WATERS
APRIL 1980

1.0 THUNDER BAY URBAN AREA

a. Area Description

This area follows the land boundary of the City of Thunder Bay and includes the harbour area between the shore and breakwall. It is highly developed with residential, industrial, commercial and service land uses. These uses are expected to expand. Some private land, not yet developed, is being used for agricultural, aggregate and woodlot purposes, but these uses may be phased out with urban expansion.

The Fort William Indian Reserve lies in this area but because it is Federal land the policies in this document do not apply. It is anticipated that the activities which take place in the reserve would be compatible with the intent of the surrounding area.

There is very little Crown land in this area and the focus of resource management has been on the fish and wildlife resources along the urban waterways.

The major issue is the lack of Crown land available to meet urban resource needs.

b. Land Use Intent

The primary role of this area is to meet the needs of this Regional growth centre. Crown resources management will focus on contributing amenities such as recreational opportunities and protection of sensitive resources to the urban landscape. This will include the protection and management of the waterways for fish and wildlife viewing, and sports angling, providing access to Lake Superior, protection of sensitive wildlife habitats such as Mission Island Marsh, offshore nesting sites and significant earth science features.

These roles will be fulfilled on Crown land where possible, through land owner agreements on private land; and by encouraging the Municipality and Lakehead Region Conservation Authority (LRCA) to consider these resource concerns on their lands. The Ministry will provide resource information for inclusion in the *Lakehead Official Plan*, the *Harbour Master Plan*, the *LRCA Watershed Plan* and other agency planning reports to ensure that resource management needs are met.

Working with the Ministry of Municipal Affairs and Housing, the Lakehead Planning Board, the City of Thunder Bay and the Lakehead Region Conservation Authority, the Ministry will ensure the Ministry hazard land policy is implemented.

Agriculture, aggregate extraction, trapping and forestry will be permitted on Crown land but will be limited because of the lack of resource base and the role of providing recreation opportunities for the City.

All Crown land uses including the services such as access roads will attempt to conform to official plans and zoning by-laws.

One (1) Area of Natural and Scientific Interest has been identified in this area.

c. Land Use Activity for Area No. 1.0 - THUNDER BAY URBAN AREA

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction	x		Existing activities will continue and new extraction on Crown land will conform with the approved official plan and zoning by-laws. Operating guidelines for the protection of other resource values will be reflected in the quarry and work permits.
Agriculture	x		Existing activities may continue. The Ministry will consider making Crown land available for agricultural purposes in consultation with the Ministry of Agriculture and Food.

Activity	Acceptable		Guidelines
	Yes	No	
Bait Fishing	x		Existing operations will continue, but no additional licences on Crown land will be considered.
Commercial Fishing	x		Existing and new commercial smelt licences will be permitted on the river mouths of this area. Other commercial harvests are not permitted.
Cottaging		x	New cottage development will not be permitted on Crown land.
Crown Land Recreation	x		The existing levels of Crown land recreation activity will continue and fish and wildlife viewing, sport angling and access to Lake Superior will be encouraged.
Forestry	x		Private woodlot improvement agreements will encourage land owners to use their bush lots to contribute to local mill and fuelwood demands.
Hunting	x		Discharge of firearms is restricted by municipal by-law.
Mining	x		Existing activities will continue and new exploration and development on Crown land will conform to the approved official plan and zoning by-laws. Operating guidelines for the protection of other resource values will be reflected in the licences and work permits.
Provincial Parks	x		1.1 **Recommended Area of Natural & Scientific Interest** la Thunder Bay Lookout
Roads	x		On Crown land, consistent with the need to access areas for recreation and resource management and conforming with the approved official plan and zoning by-laws.
Rural Residential		x	Crown land will not be disposed of for urban residential use unless not required for recreation and resource management.
Sports Fishing	x		This will be encouraged on urban rivers and in the Harbour where conditions are suitable.
Tourism		x	New tourism development may be permitted subject to the official plan and zoning by-laws.

Activity	Acceptable		Guidelines
	Yes	No	
Trapping	x		Existing activity will continue and may expand in response to nuisance animal problems associated with urban growth.
Urban Development		x	Crown land will not be disposed of for urban development unless in accordance with the official plan and zoning by-law.
Wildlife Viewing	x		
Wild Rice Harvesting	x		No resource potential identified.

1.1 1a AREA OF NATURAL AND SCIENTIFIC INTEREST

a. Area Description

Situated near the Terry Fox Memorial in the northeastern portion of Area 1, is an Area of Natural and Scientific Interest called Thunder Bay Lookout (1 ha.) which represents an earth science feature.

b. Land Use Intent

Areas of Natural and Scientific Interest are areas of land and water containing natural landscapes or features which have been identified as having values related to natural heritage appreciation, scientific study, public education or aesthetic value. They need not become "Nature Reserves" under the *Provincial Parks Act*, and their identification on private land does not indicate any intent of the Government to acquire land or to restrain the private use of land.

2.0 RURAL AREA

a. Area Description

The townships surrounding the City of Thunder Bay are the basis of this area. They are Sibley, including the community at Silver Islet, McGregor, Dorion, McTavish, Gorham, Ware, Jacques, Conmee, O'Connor, Oliver, Paipoonge, Lybster, Gillies, Scoble, Blake, Crooks, Pardee, Pearson and portions of Fowler, Forbes, Marks, and the Dawson Road Lots. Not all of these townships have organized municipal status. This area is primarily private land with development levels ranging from high to sparse. Land uses are mixed: rural residential, mining, aggregate extraction, agriculture, cottaging, public and commercial recreation such as lodges, campgrounds, parks and access points, forestry, secondary industry and commercial.

Utilities such as roads, hydro corridors, and pipelines cross the area. The new Highway 17 to Kakabeka Falls and the new hydro transmission line from Marmion Lake will further add to these existing land uses.

A major issue in this area is the lack of Crown land and water to meet the urban and rural demands for recreation and natural resource products such as aggregate and fuelwood.

b. Land Use Intent

The intent of this area is to support from both Crown and private land the resource demands of the large population of Thunder Bay and its surrounding townships.

Ministry extension programs for woodlot improvement, stream rehabilitation or parks facilities will be focused in this area to bring private and municipal vacant land into production so it may contribute to the local economy and help meet local resources needs.

Through the plan input and review process, the Ministry will also encourage local plans and private development proposals to consider resource concerns. This will ensure that the production of aggregate, fuelwood, wood fibre for the mills, minerals and agricultural produce is not inhibited by short termed plans. The signficance of these products is not in their quantity but in their proximity to the demand centre of Thunder Bay.

Crown land will play a mixed land use role. Depending on the resource potential, location, adjacent land uses and demands, Crown land will supply public recreation needs, protect sensitive features or produce natural resource products.

Public recreation on Crown land will include the maintenance or rehabilitation of rivers and streams to support angling and viewing, the protection of deer yards, waterfowl habitat and moose wintering areas for wildlife viewing and hunting and the provision of both park and Crown land recreation facilities (ranging from campgrounds to ski trails). Aggregate extraction or forestry uses will be permitted on Crown land under operation guidelines which protect other resource and recreational values.

Known nest sites, the Lakehead University Bog, the Red River Road Bog, the spectacular Nor'Wester Mountain Range, the Thunder Bay amethyst deposits, historic sites of Lappe and Pictured Lake, Silver Mountain, the historic waterway of the Kaministikwia River, and the trout waters of Loch Lomond, Oliver, Miner, Innes, MacIntosh and Silver Lakes will receive special management consideration and protection.

Recognizing the recreational, tourism and aesthetic values of the Lake Superior Shoreline, Crown land along the lake will be protected and activities within 300 metres (1000 feet) will require special Ministry approval under stringent operation guidelines.

The *Lakehead Official Plan* for the rural townships, Ministry of Municipal Affairs and Housing zoning orders, and the *Planning Act* will guide private land uses in this area. Ministry of Natural Resources' policies for aggregate production, hazard land protection and other resource policies will be addressed through these documents. The Ministry will also provide input to the *Lakehead Region Conservation Authority Watershed Plan* as a land use guide for portions of this area.

An outline of the ongoing activities which are recommended for continuation is given in the Land Use Activity section. It should be realized that in some instances, further refinement may be required.

This area has presently three (3) existing parks and one (1) candidate park is recommended for park status. As well, eleven (11) Areas of Natural and Scientific Interest have been identified.

c. Land Use Activity for Area No. 2.0 - RURAL AREA

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction	x		Existing extraction will continue and additional activity on Crown land will conform to approved official plans and zoning by-laws. Operating guidelines for the protection of other resource values will be reflected in quarry and work permits.
Agriculture	x		Existing activity will continue. The Ministry will consider making Crown land available for agricultural purposes after consultation with the Ministry of Agriculture and Food.
Bait Fishing	x		
Commercial Fishing	x		
Cottaging		x	New cottage development will not be permitted on Crown land.
Crown Land Recreation	x		The existing level of day-use recreation on Crown land will continue and may expand. This could include the development of skiing, hiking, snowmobile and equestrian trails, access to Lake Superior, as well as fishing, hunting or viewing opportunities. Unorganized Crown land camping will be discouraged because of limited resources, conflicts with adjacent land uses and the availability of commercial camping facilities.
Forestry	x		Existing levels of harvesting and regeneration will continue on Crown land. Private land forestry will be encouraged. Forest management will be modified to consider recreational and aesthetic benefits needed in this area. Timber harvesting may occur within 300m of Lake Superior, however the area will be managed according to the modified management area and access roads policies.
Hunting	x		Some townships have by-laws which restrict the discharge of firearms.
Mining	x		The 300m modified management area along Lake Superior may restrict some mineral development. Additional mining on Crown land should conform to approved official plans and zoning by-laws. Operating guidelines for the protection of other resource values will be reflected in the licences and work permits.

Activity	Acceptable		Guidelines
	Yes	No	
Provincial Parks	x		2.1 **Existing Parks** 2a. Cavern Lake Nature Reserve 2b. Ouimet Canyon Nature Reserve 2c. Kakebeka Falls Natural Environment. 2.2 **Recommended for Park Status** 2d. Devon Road Mesa Candidate 2.3 **Recommended Areas of Natural and Scientific Interest** 2e. Intola 2f. Loon Lake 2g. Mokomon 2h. Nolalu 2i. Pass Lake 2j. Russell Point 2k. Slate River 2l. Square Top Mountain 2m. Stanley Bur Oak 2n. Pearson Township 2o. Sitch Creek
Roads	x		
Rural Residential		x	Crown land will not be disposed of for rural residential use.
Sport Fishing	x		Identified prime lake trout lakes are Miner, Innes, MacIntosh, Silver, Oliver and Lock Lomond lakes.
Tourism	x		Existing levels of activity will continue. New lodge development and expansion and ski development will be considered on Crown land.
Trapping	x		
Urban Development		x	Crown land will not be disposed of for urban development.
Wildlife Viewing	x		Will be encouraged where the resource exists.
Wild Rice Harvesting	x		Will be encouraged where the resource exists.

2.1 2a CAVERN LAKE, 2b OUIMET CANYON AND 2c KAKABEKA FALLS PROVINCIAL PARKS

a. Area Description

Cavern Lake Nature Reserve Park (189 ha.), Ouimet Canyon Nature Reserve Park (777 ha.) and Kakabeka Falls Natural Environment Park (420 ha.) are provincial parks in regulation.

b. Land Use Intent

These existing provincial parks will remain in regulation and will be operated subject to approved master plans or Ministry guidelines.

2.2 2d DEVON ROAD MESA CANDIDATE

a. Area Description

The Devon Road Mesa candidate (90 ha.) is located in the southwest portion of area 2. The candidate provides life science representation which contributes to the achievement of the provincial parks objectives.

b. Land Use Intent

The area has been recommended for park status in order to protect the identified life science features.

c. Land Use Activity for 2d - DEVON ROAD MESA CANDIDATE

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Aggregate Extraction		x	
Agriculture		x	
Bait Fishing		x	
Commercial Fishing		x	
Cottaging		x	
Crown Land Recreation		x	
Forestry		x	
Hunting		x	
Mining		x	
Provincial Parks	x		
Roads		x	
Rural Residential		x	
Sport Fishing		x	
Tourism		x	
Trapping		x	
Urban Development		x	
Wildlife Viewing	x		
Wild Rice Harvesting		x	

2.3 2e to 2o AREAS OF NATURAL AND SCIENTIFIC INTEREST

a. Area Description

Areas of Natural and Scientific Interest are found throughout the whole of area 2. These areas vary in size from one (1) hectare to several hundred hectares and represent both earth and life science features.

The following areas have been identified as Areas of Natural and Scientific Interest: 2e Intola, 2f Loon Lake, 2g Mokomon, 2h Nolalu, 2i Pass Lake, 2j Russel Point, 2k Slate River, 2l Square Top Mountain, 2m Stanley Bur Oak, 2n Pearson Township and 2o Sitch Creek.

b. Land Use Intent

Areas of Natural and Scientific Interest are areas of land and water containing natural landscapes or features which have been identified as having values related to natural heritage appreciation, scientific study, public education or aesthetic value. They need not become "Nature Reserves" under the *Provincial Parks Act*, and their identification on private land does not indicate any intent of the Government to acquire land or to restrain the private use of land.

3.0 SIBLEY

a. Area Description

This area is comprised of Sibley Natural Environment Provincial Park (24,435 ha.). It is on the Sibley Peninsula east of Thunder Bay. Land uses in the park are directed by an approved master plan.

b. Land Use Intent

This park contributes to local and regional tourism recreation needs and contributes toward provincial protection/heritage appreciation targets.

The park represents four earth science landform/process themes: three biophysiographic units including rare orchids and uncommon flora; and five historical themes. All of these are described in detail in the master plan.

c. Land Use Activity for Area No 3.0 Sibley

Activities in this park will be directed by the approved Master Plan and/or Ministry guidelines.

4.0 LAKE SUPERIOR

a. Area Description

The waters and offshore islands of Lake Superior are a tourism and recreational focus for the people of Thunder Bay as well as a major source of commercial fish.

Present use is primarily commercial fishing, sport fishing, boating, sailing, camping and hunting. Development on the offshore islands is sparse. Many of these islands offer important bird nesting, feeding and shelter sites, sensitive plant communities and significant earth science features. The lake trout resource of Lake Superior is on the rebound and is expected to contribute to District sport angling needs.

b. Land Use Intent

The intent of this area is to provide a large relatively undeveloped area close to the City of Thunder Bay for low intensity public recreation and tourism opportunities. There will continue to be limited resource extraction and the extraction which does occur will abide by the required 300 metre setback from island shores, will protect sensitive features and be modified to preserve the significant recreational and aesthetic values of this area. The aggregate extraction from the bed of Black Bay which took place many years ago, is not anticipated to reoccur because of alternate available dry land sites. However, should it be required, protection of waterfowl, fisheries and wild rice resources would be paramount in the operating guidelines. An outline of the ongoing activities which are recommended for continuation is given in the Land Use Activity section. It should be realized that in some instances further refinement may be required.

There is one (1) existing park and three (3) identified candidate areas recommended for park status. As well one (1) Area of Natural and Scientific Interest has been identified.

c. Land Use Activity for Area No. 4.0 - LAKE SUPERIOR

Activity	Acceptable Yes	Acceptable No	Guidelines
Aggregate Extraction	x		Extraction from the lake bed would only be permitted under special conditions.
Agriculture		x	
Bait Fishing	x		
Commercial Fishing	x		Provincial policies concerning the maintenance and allocation of fish stocks will guide the management of commercial fisheries. These are given further definition and clarification in the *Lake Superior Tactical Fisheries Plan*.
Cottaging		x	No new Crown land disposition for cottages.
Crown Land Recreation	x		
Forestry	x		Timber extraction from the offshore islands will occur but will consider recreational and aesthetic values in accordance with the 300m modified management area along the shores.
Hunting	x		
Mining	x		Islands will have a 300m modified management area along the shores.

Activity	Acceptable		Guidelines
	Yes	No	
Provincial Parks	x		4.1 **Existing Park** 4a. Porphyry Island Nature Reserve. 4.2 **Recommended for Park Status** 4b. Edward Island Candidate 4c. Pie Island Mesa Candidate 4d. Thompson Island Candidate 4.3 **Recommended Area of Natural and Scientific Interest** 4e. Spar Island
Roads	x		To meet island resource extraction needs according to the access roads policy.
Rural Residential		x	
Sport Fishing	x		
Tourism		x	No Crown land disposition for tourism.
Trapping	x		
Urban Development		x	
Wildlife Viewing	x		
Wild Rice Harvesting	x		

4.1 4a PORPHYRY ISLAND NATURE RESERVE PROVINCIAL PARK

a. Area Description

Porphyry Island Nature Reserve Park (107 ha.) is a Provincial Park in regulation.

b. Land Use Intent

Activities in this park will be directed by an approved Master Plan and/or Ministry guidelines.

4.2 4b EDWARD ISLAND CANDIDATE, 4c PIE ISLAND MESA CANDIDATE AND 4d THOMPSON ISLAND CANDIDATE

a. Area Description

Located in Lake Superior, Edward Island (530 ha.), Pie Island (48 ha.) and Thompson Island (171 ha.) candidates provide both earth and life science representation which contributes to the achievement of the provincial parks objectives.

b. Land Use Intent

These areas have been recommended for park status in order to protect the identified earth and life science features.

c. Land Use Activity for No. 4b - EDWARD ISLAND, **4c** - PIE ISLAND MESA and **4d** -THOMPSON ISLAND CANDIDATES

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Aggregate		x	
Agriculture		x	No potential identified

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Bait Fishing		x	
Commercial Fishing		x	
Cottaging		x	
Crown Land Recreation		x	
Forestry		x	
Hunting		x	
Mining	x		It is recommended that mineral exploration/extraction be permitted on Edward Island and Thompson Island candidate areas only. (Pie Island Mesa excluded).
Provincial Parks	x		
Roads		x	
Rural Residential		x	
Sport Fishing		x	
Tourism		x	
Trapping		x	
Urban Development		x	
Wildlife Viewing	x		
Wild Rice Harvesting		x	

4.3 4e AREA OF NATURAL AND SCIENTIFIC INTEREST

a. Area Description

Spar Island (190 ha.) which is situated in Lake Superior has been identified as an Area of Natural and Scientific Interest representing both earth and life science features.

b. Land Use Intent

Areas of Natural and Scientific Interest are areas of land and water containing natural landscapes or features which have been identified as having values related to natural heritage appreciation, scientific study, public education or aesthetic value. They need not become "Nature Reserves" under the *Provincial Parks Act*, and their identification on private land does not indicate any intent of the Government to acquire land or to restrain the private use of land.

5.0 BOUNDARY WATERS

a. Area Description

Along the south border of Thunder Bay District adjacent to the United States of America is an area of high recreational, tourism and aesthetic significance. These boundary waters have long been recognized and used by recreationists, cottagers and tourists of all nationalities. It has also played a major role in the historic development of Canada and this Region.

Along the boundary waters are several pockets of private land, however cottage and tourist lodge development has remained sparse and focused on Saganaga and Gunflint Lakes and in Pardee Township.

Traditionally, resource extraction has been restricted along this waterway to protect historic, biological and earth science features and the recreational and aesthetic values of the area.

There are eleven identified prime lake trout lakes in this area.

b. Land Use Intent

The primary purpose of this area is to contribute to provincial park recreation and protection objectives.

An outline of the ongoing activities which are recommended for continuation is given in the Land Use Activity sections. It should be realized that in some instances further refinement may be required.

Area 5 is made up of three (3) candidate parks recommended for park status. Within these candidates eleven (11) lake trout lakes will be recognized and protected.

5.1 5a MIDDLE FALLS CANDIDATE

a. Area Description

The Middle Falls candidate (965 ha.) is situated along the Pigeon River in the eastern portion of Area 5. The candidate provides earth and life science feature representation as well as camping and day use opportunities.

b. Land Use Intent

The area has been recommended for park status in order to protect the identified values.

c. Land Use Activity for 5a - MIDDLE FALLS CANDIDATE

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Aggregate Extraction		x	
Agriculture		x	
Bait Fishing		x	
Commercial Fishing		x	
Cottaging		x	
Crown Land Recreation		x	
Forestry		x	
Hunting	x		It is recommended that hunting be permitted to continue.
Mining		x	
Provincial Parks	x		

Activity	Acceptable Yes	Acceptable No	Recommended Guidelines
Roads		x	General road access will not be permitted.
Rural Residential		x	
Sport Fishing	x		
Tourism		x	
Trapping	x		It is recommended that existing trapping activity be permitted to continue.
Urban Development		x	
Wildlife Viewing	x		
Wild Rice Harvesting		x	

5.2 5b LAVERENDRYE CANDIDATE

a. Area Description

Situated along the International Boundary, the LaVerendrye candidate (4,389 ha.) provides for earth science features and non-wilderness opportunities which contributes to the achievement of the provincial parks objectives.

b. Land Use Intent

The area has been recommended for park status in order to protect the identified values.

Private land holdings along the candidate park are not required to meet the park objectives. It is not the intention of the Ministry to acquire private land within the area. In the long term should private land become available consideration will be given for acquisition.

The Ministry will consult with landowners and the public in the development and management of lands within the park boundary.

c. Land Use Activity for 5b - LAVERENDRYE CANDIDATE

In addition to the acceptable uses listed below it is recommended that motorized vehicles, such as motor boats and snowmobiles, be permitted to continue within the recommended candidate park.

Activity	Acceptable Yes	Acceptable No	Recommended Guidelines
Aggregate Extraction		x	
Agriculture		x	
Bait Fishing	x		It is recommended that existing bait fishing operations be permitted to continue.
Commercial Fishing		x	
Cottaging		x	
Crown Land Recreation		x	

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Forestry		x	
Hunting	x		It is recommended that hunting be permitted to continue.
Mining		x	
Provincial Parks	x		
Roads		x	General road access will not be permitted.
Rural Residential		x	
Sport Fishing	x		Identified prime lake trout lakes are: Moose, Mountain, Rose, South, North, Little North, Little Gunflint, Gunflint, Magnetic, Gneiss and Saganaga Lakes.
Tourism	x		It is recommended that existing tourism activity be permitted to continue.
Trapping	x		It is recommended that existing trapping activity be permitted to continue.
Urban Development		x	
Wildlife Viewing	x		
Wild Rice Harvesting		x	

5.3 5c PIGEON RIVER CLAY PLAIN CANDIDATE

a. Area Description

The Pigeon River Clay Plain candidate (2,870 ha.) located in the eastern portion of Area 5 provides earth and life science representation which contributes to the achievement of the provincial parks objectives.

b. Land Use Intent

The area has been recommended for park status in order to protect the identified earth and life science features.

c. Land Use Activity for 5c - PIGEON RIVER CLAY PLAIN CANDIDATE

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Aggregate Extraction		x	
Agriculture		x	
Bait Fishing		x	
Commercial Fishing		x	

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Cottaging		x	
Crown Land Recreation		x	
Forestry		x	
Hunting		x	
Mining	x		It is recommended that mineral exploration/extraction be permitted to continue.
Provincial Parks	x		
Roads		x	General road access will not be permitted.
Rural Residential		x	
Sport Fishing		x	
Trapping	x		It is recommended that existing trapping activity be permitted to continue.
Urban Development		x	
Wildlife Viewing	x		
Wild Rice harvesting		x	

6.0 NORTHERN LIGHT LAKE CORRIDOR

a. Area Description

The land and water along Highway 588 from the rural area west to Northern Light Lake has been a traditional focus for cottaging, sport fishing, hunting, tourism and Crown land recreation. Development in the area remains sparse but nodes of lodges and cottages do exist on lakes touched by the highway.

There are nine identified prime lake trout lakes, several known raptor nest sites and archaeological and historic sites in the area.

Resource extraction has primarily been forestry and wild rice harvesting. Mineral exploration has been limited but the potential does exist.

b. Land Use Intent

The primary role of this area is to contribute to the District's private, public and commercial recreation needs. Resource extraction will continue but will recognize the area's recreational and aesthetic benefits.

While the lake will be managed according to the Modified Management Area policy to protect the lake trout resource, resource management within the skyline of the lake will consider recreational values and aesthetics and maintenance of the red and white pine stands which contribute to this lake's character.

The nine identified lake trout lakes will be managed according to the Modified Management Area policy. They include: Northern Light, Icarus, Sunbow, Sunbeam, Sunset, Yellowhammer, Sandstone, Arrow and Wabindon Lakes.

Additional Crown lot cottaging will be provided by a lake development plan for Iron Range Lake.

An outline of the ongoing activities which are recommended for continuation is given in the Land Use Activity section. It should be realized that in some instances further refinement may be required.

There are three (3) candidate parks recommended for park status in this area.

c. Land Use Activity for 6.0 - NORTHERN LIGHT LAKE CORRIDOR

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction	x		Operating guidelines for the protection of tourism values, sensitive cultural resources, important fish and wildlife habitat and recreational and aesthetic attributes will be reflected in quarry and work permits.
Agriculture		x	
Bait Fishing	x		
Commercial Fishing	x		Existing levels of use will continue within the guidelines of the resource capabilities and the demands for sport angling.
Cottaging	x		A lake development plan will be prepared for Iron Range Lake.
Crown Land Recreation	x		

Activity	Acceptable Yes	Acceptable No	Guidelines
Forestry	x		Sustained yield timber harvesting will continue. Operating and annual plans will contain specific guidelines such as road and modified management areas for protecting tourism and recreation uses, maintaining and improving fish and wildlife habitats, protecting sensitive areas and maintaining the red and white pine species in the area.
Hunting	x		
Mining	x		Exploration and extraction will continue. Operating guidelines for protecting tourism and recreation values, sensitive areas, and fish and wildlife habitats will be reflected in licences and work permits.
Provincial Parks	x		6.1 **Recommended for Park Status** 6a Arrowhead Peninsula Candidate 6b Arrow Lake Candidate 6c Whitefish-West Candidate
Roads	x		Access will be managed to meet both recreation and resource extraction needs.
Rural Residential		x	No additional Crown Land disposition.
Sport Fishing	x		Identified prime lake trout lakes are: Northern Light, Icarus, Sunbow, Sunbeam, Sunset, Yellowhammer, Sandstone, Arrow and Wabindon Lakes.
Tourism	x		Existing activity will continue. Future development on both private and Crown land will consider public recreation needs, sensitive cultural features, lake trout lakes and aesthetic values.
Trapping	x		
Urban Development		x	
Wildlife Viewing	x		
Wild Rice Harvesting	x		

6.1 6a ARROWHEAD PENINSULA CANDIDATE

a. Area Description

Situated along the shoreline of Northern Light Lake, the Arrowhead Peninsula candidate (490 ha) provides life science representation which contributes to the achievement of the provincial parks objectives.

b. Land Use Intent

The area has been recommended for park status in order to protect the identified values.

c. Land Use Activity for 6a - ARROWHEAD PENINSULA CANDIDATE

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Aggregate Extraction		x	
Agriculture		x	
Bait Fishing		x	
Commercial Fishing		x	
Cottaging		x	
Crown Land Recreation		x	
Forestry		x	
Hunting		x	
Mining		x	
Provincial Parks	x		
Roads		x	
Rural Residential		x	
Sport Fishing		x	
Tourism		x	
Trapping		x	
Urban Development		x	
Wildlife Viewing	x		
Wild Rice Harvesting		x	

6.1 6b ARROW LAKE CANDIDATE

a. Area Description

The Arrow Lake candidate (445 ha.) is located along the north-central shoreline of Arrow Lake. The candidate provides life science representation and car-camping opportunities.

b. Land Use Intent

The area has been recommended for park status in order to protect the identified values.

c. Land Use Activity for 6b - ARROW LAKE CANDIDATE

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Aggregate Extraction		x	
Agriculture		x	
Bait Fishing		x	
Commercial Fishing		x	
Cottaging		x	
Crown Land Recreation		x	
Forestry		x	
Hunting		x	
Mining		x	
Provincial Parks	x		
Roads		x	General road access will not be permitted.
Rural Residential		x	
Sport Fishing	x		It is recommended that sport fishing be permitted to continue.
Tourism		x	
Trapping		x	
Urban Development		x	
Wildlife Viewing	x		
Wild Rice Harvesting		x	

6.1 6c WHITEFISH LAKE - WEST CANDIDATE

a. Area Description

Situated along the southwest portion of Whitefish Lake, the candidate (1,150 ha.) provides life science representation which contributes to the achievement of the provincial parks objectives.

b. Land Use Intent

The area has been recommended for park status in order to protect the identified life science features.

c. Land Use Activity for 6c - WHITEFISH LAKE - WEST CANDIDATE

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Aggregate Extraction		x	
Agriculture		x	
Bait Fishing		x	
Commercial Fishing		x	
Cottaging		x	
Crown Land Recreation		x	
Forestry		x	
Hunting		x	
Mining		x	
Provincial Parks	x		
Roads		x	
Rural Residential		x	
Sport Fishing	x		It is recommended that sport fishing be permitted to continue.
Tourism		x	
Trapping		x	
Urban Development		x	
Wildlife Viewing	x		
Wild Rice Harvesting		x	

7.0 MATAWIN

a. Area Description

In the southwest portion of the District is an area which has traditionally been popular for Crown land recreation such as fishing, hunting and camping. Forestry operations have occurred in the past and there is potential for additional harvesting and mining activity.

There are several known eagle nesting sites and three identified prime lake trout lakes.

Existing development levels are sparse but there is potential for cottage development on eight lakes in the area.

b. Land Use Intent

In this area public and private recreation and resource production will have equal emphasis.

Operating guidelines for resource extraction activities will consider other resource values, and recreational land uses as well as economic extraction factors. The requirements of the *Quetico Park Master Plan* will be recognized when dealing with resource activities along the western boundary of this area.

As demand warrants it, cottages may be provided by lake development plans for Weikwabinonaw, McGrath, Hoof, Blunder, Marks, Chambers, Swallow and Nelson Lakes.

The identified prime lake trout lakes of Kamikau, Mowe and Titmarsh will be managed in accordance with the modified management area policy.

An outline of the ongoing activities which are recommended for continuation is given in the Land Use Activity section. It should be realized that in some instances, further refinement may be required.

This area has identified one (1) candidate park recommended for park status.

c. Land Use Activity for 7.0 - MATAWIN

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction	x		Operating guidelines for the protection of recreational values and important fish and wildlife habitats will be reflected in quarry and work permits.
Agriculture		x	
Bait Fishing	x		Existing level of use may continue and expand within the limits of the resource.
Commercial Fishing		x	No potential identified in light of sport angling needs.
Cottaging	x		Lake development plans will be prepared for Weikwabinonaw, McGrath, Hoof, Marks, Blunder, Chambers, Swallow and Nelson Lakes.
Crown Land Recreation	x		
Forestry	x		Forestry activity will continue and be permitted to expand. Operating and annual plans will contain specific guidelines to protect other resource values and recreational uses.
Hunting	x		
Mining	x		Operating guidelines set out in licences and work permits will protect other resource values and recreational uses.

Activity	Acceptable		Guidelines
	Yes	No	
Provincial Parks	x		7.1 **Recommended for Park Status** 7a Matawin River Candidate
Roads	x		New roads will be developed to achieve both recreation and resource extraction benefits.
Rural Residential		x	
Sport Fishing	x		Identified prime lake trout lakes are Kamikau, Mowe and Titmarsh Lakes.
Tourism	x		Future use of Crown land for tourism will be assessed on a case-by-case basis.
Trapping	x		
Urban Development		x	
Wildlife Viewing	x		
Wild Rice Harvesting	x		

7.1 7a MATAWIN RIVER CANDIDATE

a. Area Description

The Matawin River candidate (2,650 ha.) is located in the eastern portion of Area 7. The candidate provides life science representation which contributes to the achievement of the provincial parks objectives.

b. Land Use Intent

The area has been recommended for park status in order to protect the identified life science features.

c. Land Use Activity for 7a - MATAWIN RIVER CANDIDATE

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Aggregate Extraction		x	
Agriculture		x	
Bait Fishing		x	
Commercial Fishing		x	
Cottaging		x	
Crown Land Recreation		x	
Forestry		x	
Hunting	x		It is recommended that hunting be permitted to continue.

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Mining		x	
Provincial Parks	x		
Roads		x	
Rural Residential		x	
Sport Fishing	x		It is recommended that sport fishing be permitted to continue.
Tourism		x	
Trapping	x		It is recommended that existing trapping activity be permitted to continue.
Urban Development		x	
Wildlife Viewing	x		
Wild Rice Harvesting		x	

8.0 HURONIAN

a. Area Description

At the west end of the District, north of Highway 11 is an area of high resource production and recreation potential. Cottaging, fishing, hunting, tourism outpost camps, camping, forestry and mineral exploration are the present uses in the area.

Development has been sparse but there is potential for increased levels of use. The area is crossed by several corridors; Ontario Hydro transmission lines, CN rail and Highway 11.

There are seven identified prime lake trout lakes. Baril, Windigoostigwan, Fork, Huronian, Stetham, Burnt Island and Rudge Lakes.

No specific problems have been identified in this area, however, the continuing issue of the blending of resource extraction and recreation exists.

b. Land Use Intent

Resource extraction and recreation uses will be of equal importance in this area. There will be an attempt to provide additional cottaging by preparing lake development plans for Crayfish and Bedivere Lakes, when demand warrants.

The identified prime lake trout lakes will be managed with regard to the modified management area policy.

The new Atikokan to Thunder Bay transmission line will be developed in this area.

c. Land Use Activity for 8.0 - HURONIAN

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction	x		Operating guidelines for the protection of tourism, recreation and important fish and wildlife habitat will be reflected in quarry and work permits.
Agriculture		x	No potential identified.
Bait Fishing	x		
Commercial Fishing	x		Commercial fishing is permitted within the capability of the resource and the demands for sport angling.
Cottaging	x		The existing level of use will continue and as demand warrants, additional Crown land will be made available for cottaging through lake development planning on Crayfish and Bedivere Lakes.
Crown Land Recreation	x		Crown land recreation will be focused on areas and lakes which can sustain use.
Forestry	x		Forestry will continue and expand in this area. Operating and annual plans will contain specific guidelines for the protection of tourism and recreation resources and important fish and wildlife habitat.
Hunting	x		Hunting may be restricted in specific areas if it endangers life and real property, i.e. active resource extraction work areas.

Activity	Acceptable		Guidelines
	Yes	No	
Mining	x		
Provincial Parks		x	
Roads	x		New road planning and development will consider multiple use needs.
Rural Residential		x	Existing activity on Crown land will continue but additional development will not be considered. Private land will meet the need for rural residential uses.
Sport Fishing	x		Identified prime lake trout lakes include Baril, Windigoostigwan, Fork, Huronian, Stetham, Burnt Island and Rudge Lakes.
Tourism	x		Existing tourism activity will continue recognizing the overall intent of this area. Additional lodge or outpost development on Crown land will be considered and managed according to the access roads and modified management area policies.
Trapping	x		
Urban Development		x	
Wildlife Viewing	x		
Wild Rice Harvesting	x		

9.0 SHEBANDOWAN - LAC DES MILLE LACS

a. Area Description

This chain of lakes includes Lac des Mille Lacs, Kashabowie, Shebandowan, Burchell and Greenwater Lakes. These waterbodies have traditionally been major cottaging, tourism lodge, Crown land camping and fishing focuses for the residents of Thunder Bay and the tourists in this District.

Limited resource extraction such as commercial fishing, trapping, mining and forestry have gone on in the past but have given careful consideration to the other land uses and development on these lakes.

Although development levels for the area are sparse, there are pockets of moderate to dense development along the shoreline of Shebandowan, Kashabowie and Lac des Mille Lacs. Highway 11, CN rail and several Ontario Hydro transmission lines cross this area.

A portion of the Lac des Mille Lacs Indian Reserve is included in this area but the policies of this document do not apply to this Federal land. It is anticipated that activities which take place within the reserve would be compatible with the intent of the surrounding area.

There are numerous eagle nesting sites and historic and archaeological sites, and three identified prime lake trout lakes.

The water levels on the major waterbodies are regulated by Ontario Hydro for hydro-electric generation.

The primary issue is the blending of resource extraction and recreation land uses.

b. Land Use Intent

In view of traditional recreational uses and developments, the proximity to the City of Thunder Bay and the degree of access, this area's main role will be to meet recreation and tourism needs of the District.

The water management program of Ontario Hydro is recognised as an important component in managing the fisheries of these lakes. Fisheries management will focus on meeting sport angling needs and continuing the existing fishery on Lac des Mille Lacs for non-sport species. Lake management plans will be prepared to reduce land use impacts on the lakes and guide the use of the lakes for power generation, fishing, boating and recreation. The *Shebandowan Lake Land Use Plan* will assist in the implementation of the *Land Use Guidelines*.

The construction of the Atikokan to Thunder Bay Ontario Hydro transmission line will cross this area.

Cottaging uses is also expected to expand. Private land development should meet most cottage demands. However, if demand warrants, a lake development plan will be prepared to provide Crown land on Lac des Mille Lacs for cottaging.

The prime lake trout lakes; Greenwater, Loch Erne and Burchell; and the known eagle nesting sites and historic and archaeological sites will be protected.

Resource extraction activities will also be modified to protect the tourism, recreation and aesthetic values of this area, and reduce conflicts with other landowners and land uses.

The recreational values of Shebandowan and Lac des Mille Lacs will be accommodated through the establishment of modified management areas which may restrict extraction and the location and closure of access roads.

An outline of the ongoing activities which are recommended for continuation is given in the Land Use Activity section. It should be realized that in some instances further refinement may be required.

Within this area two (2) candidate parks are recommended for park status, as well, one (1) Area of Natural and Scientific Interest has been identified.

c. Land Use Activity for 9.0 - SHEBANDOWAN-LAC DES MILLE LACS

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction	x		Operating guidelines for extraction will protect recreation, tourism and aesthetic values, important fish and wildlife habitats and cultural sites.
Agriculture		x	No potential identified.
Bait Fishing	x		
Commercial Fishing	x		No additional licences will be issued. The licence on Shebandowan Lake will be phased out. Also, in an effort to enhance the sports fishery, existing licences will focus on non-sport species.
Cottaging	x		Crown land may be made available through lake development planning on Lac des Mille Lacs. Private land development for cottaging will continue and may expand to meet demand within the guidelines of the lake management plans.
Crown Land Recreation	x		The existing levels of use will be maintained but focused on sites which can sustain use. Since the area is already highly developed and used, expansion of Crown land recreation is not anticipated and will not be encouraged. Private recreation facilities will be encouraged to meet the public's additional demands for recreation.
Forestry	x		The existing levels of forestry (harvesting, regeneration and research) will continue. Operating and annual plans will contain specific guidelines to protect aesthetic values, tourism operations, recreation facilities, cultural sites and important fish and wildlife habitat. On Lac des Mille Lacs and Shebandowan Lake, particular attention will be given to managing the shoreline and access roads to protect the aesthetic and recreational values of these lakes. These values will be protected by the application of the modified management area and access roads policies.
Hunting	x		
Mining	x		Exploration and development will continue. Operating guidelines will protect the tourism, recreation and aesthetic values of the area, fish and wildlife resources, and cultural sites and will be reflected in the licences and work permits.

Activity	Acceptable Yes	Acceptable No	Guidelines
Provincial Parks	x		**9.1 Recommended for Park Status** 9a. Kashabowie Candidate 9b. Little Greenwater Candidate **9.2 Recommended Area of Natural and Scientific Interest** 9c. Swamp Creek
Roads	x		Road planning and development will consider all access needs (i.e. mining and forestry) as well as the protection of other resource values and land uses of this area.
Rural Residential		x	Private land development for this use may continue but Crown land will not be disposed of for new residential use.
Sport Fishing	x		Identified prime lake trout lakes are Greenwater, Loch Erne and Burchell Lakes.
Tourism	x		Existing levels of tourism use will continue. New lodge development on private land and/or Crown land will consider resource capabilities to sustain use.
Trapping	x		
Urban Development		x	
Wildlife Viewing	x		
Wild Rice Harvesting	x		

9.1 9a KASHABOWIE CANDIDATE

a. Area Description

The Kashabowie candidate (2,064 ha.) is situated along the southeast shore of Kashabowie Lake. The candidate provides earth and life science feature representation as well as car-camping and day use opportunities.

b. Land Use Intent

The area has been recommended for park status in order to protect the identified values.

c. Land Use Activity for 9a - KASHABOWIE CANDIDATE

Activity	Acceptable Yes	Acceptable No	Recommended Guidelines
Aggregate Extraction		x	
Agriculture		x	
Bait Fishing		x	
Commercial Fishing		x	

Activity	Acceptable Yes	Acceptable No	Recommended Guidelines
Cottaging		x	
Crown Land Recreation		x	
Forestry		x	
Hunting	x		It is recommended that hunting be permitted to continue.
Mining		x	
Provincial Parks	x		
Roads		x	General road access will not be permitted.
Rural Residential		x	
Sport Fishing	x		It is recommended that sport fishing be permitted to continue.
Tourism		x	
Trapping	x		It is recommended that existing trapping activity be permitted to continue.
Urban Development		x	
Wildlife Viewing	x		
Wild Rice Harvesting		x	

9.1 9b LITTLE GREENWATER CANDIDATE

a. Area Description

The candidate (224 ha.) is located south of Greenwater Lake and provides earth science representation which contributes to the achievement of the provincial parks objectives.

b. Land Use Intent

The area has been recommended for park status in order to protect the identified earth science features.

c. Land Use Activity for 9b - LITTLE GREENWATER CANDIDATE

Activity	Acceptable Yes	Acceptable No	Recommended Guidelines
Aggregate Extraction		x	
Agriculture		x	
Bait Fishing		x	
Commercial Fishing		x	
Cottaging		x	

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Crown Land Recreation		x	
Forestry		x	
Hunting		x	
Mining		x	
Provincial Parks	x		
Roads		x	
Rural Residential		x	
Sport Fishing		x	
Tourism		x	
Trapping		x	
Urban Development		x	
Wildlife Viewing	x		
Wild Rice Harvesting		x	

9.2 9c AREA OF NATURAL AND SCIENTIFIC INTEREST

a. Area Description

Swamp Creek (1 ha.) situated at the northeast end of Lake Shebandowan has been identified as an Area of Natural and Scientific Interest.

b. Land Use Intent

Areas of Natural and Scientific Interest are areas of land and water containing natural landscapes or features which have been identified as having values related to natural heritage appreciation, scientific study, public education or aesthetic value. They need not become "Nature Reserves" under the *Provincial Parks Act*, and their identification on private land does not indicate any intent of the Government to acquire land or to restrain the private use of land.

10.0 ENGLISH RIVER

a. Area Description

On the western border of the District, north of Highway 17 is the English River. This is a portion of an important recreational waterway system in both Ignace and Atikokan Districts.

This recreational corridor is presently used for cottaging, canoeing, fishing, hunting and tourism development. Development levels are sparse.

Resource extraction has been primarily timber harvesting.

Corridors in this area include the Trans Canada Highway, Ontario Hydro transmission lines and the Trans Canada pipeline.

b. Land Use Intent

This narrow area along the English River will primarily meet recreational needs and provide a linkage between the Ignace and Atikokan Districts' recreation resources. Pyramid Lake has been identified for special consideration as a tourism lake.

Resource extraction will continue but will be modified to consider the recreational role of the English River.

An outline of the ongoing activities which are recommended for continuation is given in the Land Use Activity section. It should be realized that in some instances further refinement may be required.

c. Land Use Activity for 10.0 - ENGLISH RIVER

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction		x	Limited to meeting local needs, aggregate will not be permitted to be extracted from this waterway area unless alternate sources are absolutely not available within economic haul distance (30 km) of the demand.
Agriculture		x	No potential identified.
Bait Fishing	x		
Commercial Fishing		x	No potential identified.
Cottaging		x	Crown Land will not be disposed of for cottaging use.
Crown Land Recreation	x		
Forestry	x		The existing levels of harvesting will continue. Operating and annual plans will contain specific guidelines to protect the aesthetic and recreational values of this river and important fish and wildlife habitats of the area. This will include access road locations, river crossings and modified management areas.
Hunting	x		
Mining	x		Exploration and development will continue. The licences and work permits will include operating guidelines which protect the aesthetic and recreational values of the river and important fish and wildlife habitats of the area.

Activity	Acceptable		Guidelines
	Yes	No	
Provincial Parks		x	
Roads	x		Road planning and development will be multi-purpose and will consider minimizing impacts on the area's values. Direction provided by the access road policy will be followed.
Rural Residential		x	
Sport Fishing	x		
Tourism	x		Existing tourism facilities will continue. Private and Crown land development for tourism will be permitted. Pyramid Lake has been identified for tourism use.
Trapping	x		
Urban Development		x	
Wildlife Viewing	x		
Wild Rice Harvesting	x		

11.0 DOG LAKE

a. Area Description

This large urban oriented lake offers good recreational opportunities for the people of Thunder Bay.

Present uses include cottaging, Crown land camping, fishing, hunting, forestry, aggregate production and mineral exploration. The levels of development are moderate on the south and southeast shoreline and sparse on the rest of the lake.

There is a large Ontario Hydro generating station in the area and Dog Lake is managed as a water reservoir for electric power generation.

There are numerous historic and archaeological sites along the shore of the lake and several sensitive wetlands and nest sites identified in the northern portion of the lake, along Block Creek, Dog River and Creighton Bay.

b. Land Use Intent

The primary role of this area is to serve the near urban recreational needs of the District.

An effort will be made to provide additional cottaging through a lake development plan. Private lands will also provide additional recreation development; cottages or lodges.

The known historic and archaeological sites and the sensitive fish and wildlife resources will be protected within the operating guidelines and development proposals of all land uses.

Resource extraction activities will continue recognizing the historic, fish and wildlife and recreational values of Dog Lake. A lake management plan will be written to coordinate the private recreation, tourism, Crown land recreation and hydro uses of Dog Lake.

An outline of the ongoing activities which are recommended for continuation is given in the Land Use Activity section. It should be realized in some instances, further refinement may be required.

This area has identified one (1) candidate park recommended for park status.

c. Land Use Activity for 11.0 - DOG LAKE

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction	x		Extraction will be permitted to meet local and regional needs. Operating guidelines to protect the sensitive cultural features, important fish and wildlife habitats and recreation values of the area will be reflected in the quarry and work permits.
Agriculture		x	No potential identified.
Bait Fishing	x		
Commercial Fishing	x		No existing potential identified.
Cottaging	x		Crown land may be made available through lake development planning on Dog Lake.
Crown Land Recreation	x		The existing level of use will be maintained and focused on areas which can sustain use. In addition, there will be some limited development of low intensity public recreation facilities (day-use and camping), as access is developed throughout the area.

Activity	Acceptable		Guidelines
	Yes	No	
Forestry	x		The existing level of forestry and regeneration will be permitted to continue. Operating and annual plans will contain specific guidelines for the protection of the recreation, tourism and aesthetic values of the lake plus the cultural features and important fish and wildlife habitats of the area. The recreational role of Dog Lake is expected to have an impact on forestry operations in the form of road planning and modified management of the shoreline.
Hunting	x		
Mining	x		Exploration will continue. Operating guidelines which protect the lake's other resource values and land uses will be reflected in the licences and work permits.
Provincial Parks	x		11.1 **Recommended for Park Status** 11a. Silver Falls Candidate
Roads	x		Road planning and development will be multi-purpose in nature.
Rural Residential		x	No Crown land disposition for this use.
Sport Fishing	x		
Tourism	x		Existing tourism use will continue. New lodge development on private land and/or Crown land will consider resource capabilities to sustain use and minimize conflicts with other existing uses.
Trapping	x		
Urban Development		x	
Wildlife Viewing	x		
Wild Rice Harvesting	x		

11.1 11a SILVER FALLS CANDIDATE

a. Area Description

The Silver Falls candidate (2,406 ha.) is located south of Dog Lake along the Dog River and provides earth science representation along with both car-camping and day use opportunities.

b. Land Use Intent

The area has been recommended for park status in order to protect the identified values.

c. Land Use Activity for 11a - SILVER FALLS CANDIDATE

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Aggregate Extraction		x	
Agriculture		x	
Bait Fishing		x	
Commercial Fishing		x	
Cottaging		x	
Crown Land Recreation		x	
Forestry		x	
Hunting	x		It is recommended that hunting be permitted to continue.
Mining		x	
Provincial Parks	x		
Roads		x	General road access will not be permitted.
Rural Residential		x	
Sport Fishing	x		It is recommended that sport fishing be permitted to continue.
Tourism		x	
Trapping	x		It is recommended that existing trapping activity be permitted to continue.
Urban Development		x	
Wildlife Viewing	x		
Wild Rice Harvesting		x	

12.0 SPRUCE - CURRENT

a. Area Description

North of the urban and rural areas of Thunder Bay extending up the Spruce River Road (Highway 527) and east to the District border is an area which offers good recreational and resource production capabilities.

It is popular for cottaging, fishing, hunting and Crown land camping and has been an important uranium exploration, amethyst mining, aggregate extraction and timber harvesting area.

There are five identified prime lake trout lakes; Scarp, Abigogami, Moraine, Greenwich and Little Moraine Lakes. Numerous brook trout streams, sensitive raptor nest sites and interesting earth science features are found in this area..

The sparse development in this area is concentrated on the cottage subdivisions on the lakes along the Spruce River Road.

b. Land Use Intent

Resource operations and recreational activity will have equal importance in this area.

Resource extraction will continue at present levels and may expand to meet local and Regional aggregate needs, tourism and mining interests in amethyst production, and recent active mineral exploration. Operations will be modified to maintain and enhance fish and wildlife habitats to support Crown land recreation activities.

An effort will be made to supply demand for additional cottages through lake development planning of the Spruce River road lakes; Poshkokogan, Rinker, Edmondson, McLeish, Max, Mawn, Decourcey and Starnes Lakes and Wolf Lake in the Current River area.

An outline of the ongoing activities which are recommended for continuation is given in the Land Use Activity section. It should be realized that in some instances further refinement may be required.

c. Land Use Activity for 12.0 - SPRUCE-CURRENT

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction	x		Operating guidelines for the protection of cottaging, Crown land recreation and fish and wildlife resources will be reflected within quarry and work permits. Applications for new amethyst mines are anticipated and the aggregate resources will contribute to local and regional needs.
Agriculture		x	Although agricultural uses exist in the adjacent Dorion area, no potential has been identified on Crown land in this area.
Bait Fishing	x		
Commercial Fishing	x		
Cottaging	x		Crown land will be made available through lake development planning on Poshkokogan, Rinker, Edmondson, McLeish, Max, Mawn, Decourcey, Wolf and Starnes Lakes.

Activity	Acceptable		Guidelines
	Yes	No	
Crown Land Recreation	x		The existing level of use may continue. Since the area is well accessed additional access points will not be developed but existing ones may be relocated to sites capable of sustaining use.
Forestry	x		Forestry activities will continue. Operating and annual plans will contain specific guidelines which protect the Crown land recreation values, fish and wildlife resources, interesting earth science features and other land uses of this area.
Hunting	x		
Mining	x		Exploration and development will continue and is expected to expand, i.e. amethyst or uranium. Operating guidelines which protect other resource values of the area will be reflected in licences and work permits.
Provincial Parks		x	
Roads	x		Road planning and development will be multipurpose to access forest and mineral resources and meet recreational needs.
Rural Residential		x	
Sport Fishing	x		Identified prime lake trout lakes are: Scarp, Abigogami, Moraine, Greenwich and Little Moraine Lakes.
Tourism	x		Tourism activity is permitted on Crown land in this area, recognizing the key land uses of public recreation and resource production and their resulting access and servicing which may detract from tourism uses.
Trapping	x		
Urban Development		x	
Wildlife Viewing	x		
Wild Rice Harvesting	x		

13.0 GREW RIVER

a. Area Description

The Grew River and associated chain of lakes between Pakashkan and Stonehouse Lakes is one of the few remaining areas of the District with limited access and good tourism potential.

Present uses include tourism outpost camps, canoeing, Crown land camping, trapping and forest harvesting.

The prime issue for this area will be the maintenance of the tourism potential.

b. Land Use Intent

Primary recreational activities will consist of cottaging on Pakashkan Lake, Crown land recreation such as fishing and canoeing on the Grew River and tourism on the chain of lakes in the area.

Dora, Loganberry, Grew, Tommyhow, Holly, Stonehouse and Kearns have been identified as tourism lakes. Both the access roads policy and the modified management area policy will guide management around these lakes in order to maintain tourism potential.

Cottaging will be provided if demand warrants, on Pakashkan Lake through lake development planning.

Resource extraction will continue in the area, recognizing the tourism and recreational values in the area.

An outline of the ongoing activities which are recommended for continuation is given in the Land Use Activity section. It should be realized that in some instances further refinement may be required.

c. Land Use Activity for 13.0 - GREW RIVER

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction	x		Aggregate demand is not expected to be high, but may be required to meet local needs. Operation guidelines to protect tourism, recreational and aesthetic values and important fish and wildlife habitats will be reflected in quarry and work permits.
Agriculture		x	
Bait Fishing	x		
Commercial Fishing		x	
Cottaging	x		A lake development plan will be prepared for Pakashkan Lake.
Crown Land Recreation	x		The existing level of Crown land recreation will continue. Control of access in this area is expected to limit additional facilities.
Forestry	x		The existing level of forestry activity will continue. Operating and annual plans will contain specific guidelines to protect identified tourism lakes, recreational resources and important fish and wildlife habitats.
Hunting	x		

Activity	Acceptable		Guidelines
	Yes	No	
Mining	x		Exploration and development may continue. Operating guidelines to protect the other resource values of the area will be reflected in licences and work permits.
Provincial Parks		x	
Roads	x		The tourism role of this area will necessitate the control of access. The access roads policy will provide this opportunity.
Rural Residential		x	
Sport Fishing	x		
Tourism	x		Identified tourism lakes are Dora, Loganberry, Grew, Holly, Kearns, Stonehouse and Tommyhow Lakes.
Trapping	x		
Urban Development		x	
Wildlife Viewing	x		
Wild Rice Harvesting	x		

14.0 BRIGHTSAND

a. Area Description

This candidate park follows the Brightsand River from Pakashkan Lake northwest into Ignace District and back northeast to Harmon Lake, then north out of Thunder Bay District.

Present use is primarily oriented toward Crown land recreation, i.e. canoeing, hunting and fishing. Other uses include forestry and trapping.

Present development levels are sparse and limited to a few outpost camps.

b. Land Use Intent

The Brightsand River candidate park is being recommended for park status. Given the variety of uses that are ongoing within the area, it is further recommended some of these activities be permitted to continue. These uses are found in the Land Use Activity section. It must be realised that in some instances, further refinement may be required.

c. Land Use Activity for 14.0 - BRIGHTSAND CANDIDATE

In addition to the acceptable uses listed below, it is also recommended that motor boat activity be permitted to continue.

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Aggregate Extraction		x	
Agriculture		x	
Bait Fishing	x		
Commercial Fishing		x	
Cottaging		x	
Crown Land Recreation		x	
Forestry		x	
Hunting	x		It is recommended that hunting be permitted to continue.
Mining		x	
Provincial Parks	x		
Roads		x	General access will not be permitted.
Rural Residential		x	

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Sport Fishing	x		It is recommended that sport fishing be permitted to continue.
Tourism	x		It is recommended that existing tourism activity be permitted to continue.
Trapping	x		It is recommended that existing trapping activity be permitted to continue.
Urban Development		x	
Wildlife Viewing	x		
Wild Rice Harvesting		x	

15.0 GRAHAM

a. Area Description

In the northwest corner of the District is a water network which offers large sand beaches, several excellent canoe routes, remote lakes, and good fishing and hunting to recreationalists. These uses have been the primary focus of this area in the past, and its development has been limited to a few outpost camps scattered throughout the area.

In the future, with extension of the forest access network of the Graham area, this section of the District will also provide forest harvesting opportunities.

b. Land Use Intent

In the future this area will serve both a recreation and resource production role. This area will contribute to the recreational needs of the public and the tourism industry. The canoe routes and sand beaches will be managed for Crown land recreation. Five lakes; Rude, Mountairy, Hilltop, Gridiron and Sassafras Lakes have been identified for tourism use.

Resource extraction operations will be permitted but will recognize the recreational role of this area.

An outline of the ongoing activities which are recommended for continuation is given in the Land Use Activity section. It should be realized that in some instances further refinement may be required.

c. Land Use Activity for 15.0 - GRAHAM

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction	x		Local road building is the only anticipated demand for aggregate. Operating guidelines to protect the recreational and tourism values and uses, as well as important fish and wildlife habitats will be reflected in quarry and working permits.
Agriculture		x	No potential identified.
Bait Fishing	x		
Commercial Fishing	x		
Cottaging		x	No new Crown land disposition for cottaging.
Crown Land Recreation	x		Existing levels of use will continue. As access into this area develops, expansion of Crown land recreation is anticipated. Control and management of these uses will consider a site's capability to sustain use and the identified lakes for tourism.
Forestry	x		Forestry activity is permitted. Operating and annual plans will recognize the roles of recreation and tourism in this area and will contain specific guidelines to protect the recreation and tourism values of the area and important fish and wildlife habitats.

Activity	Acceptable		Guidelines
	Yes	No	
Hunting	x		
Mining	x		Exploration and development is permitted. Operating guidelines provided in the licences and work permits will protect the other resource values of this area.
Provincial Parks		x	
Roads	x		Road planning and development will be multipurpose and will be guided by the access roads policy.
Rural Residential		x	
Sport Fishing	x		
Tourism	x		Identified tourism lakes include Rude, Mountairy, Hilltop, Gridiron and Sassafras Lakes. Both the access road policy and the modified management areas policy will guide the management of these lakes.
Trapping	x		
Urban Development		x	
Wildlife Viewing	x		
Wild Rice Harvesting	x		

16.0 KOPKA

a. Area Description

Across the north end of Thunder Bay District is the Kopka River candidate park. This important recreational resource is shared with Nipigon District.

Present use is primarily Crown land recreation such as canoeing, fishing and hunting; and forest operations and trapping.

Development levels are sparse, limited to a few outpost camps. There are a few known raptor nest sites along the waterway and Uneven Lake is identified as a prime lake trout lake.

b. Land Use Intent

The Kopka River candidate park area is being recommended for park status. Given the variety of uses that are ongoing within the area it is further recommended some of these activities be permitted to continue. These uses are found in the Land Use Activity section. It must be realized that in some instances further refinement may be required.

c. Land Use Activity for 16.0 - KOPKA CANDIDATE

In addition to the acceptable uses listed below it is recommended that motor boat activity be permitted to continue.

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Aggregate Extraction		x	
Agriculture		x	
Bait Fishing	x		
Commercial Fishing		x	
Cottaging		x	
Crown Land Recreation		x	
Forestry		x	
Hunting	x		It is recommended that hunting be permitted to continue.
Mining		x	
Provincial Parks	x		
Roads		x	General access will not be permitted.
Rural Residential		x	

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Sport Fishing	x		It is recommended that sport fishing be permitted to continue. Uneven Lake is an identified prime lake trout lake.
Tourism	x		It is recommended that existing tourism activity be permitted to continue.
Trapping	x		It is recommended that existing trapping activity be permitted to continue.
Urban Development		x	
Wildlife Viewing	x		
Wild Rice Harvesting		x	

17.0 HINTERLAND

a. Area Description

The lands and waters lying beyond the urban and rural areas of Thunder Bay City and the recreational focuses of the boundary waterways and Lac des Mille Lacs, Dog, Shebandowan and Northern Light Lakes is the Hinterland. The resources of this large area support local industries and an extensive recreational and tourism industry.

Development is sparse for the whole area but pockets of moderate to dense development occur along major rail and highway corridors at places like Shabaqua and Upsala. Other types of development include tourism lodges, highway services such as motels and gas stations, the Trans Canada pipeline, hydro transmission lines and numerous secondary and tertiary resource access roads.

The two Indian Reserves at Seine River and Lac des Mille Lacs lie in this area but the policies of this document do not apply to them. Hopefully, activities which take place within the reserves will be compatible with the intent of the surrounding area.

Several historic and archaeological sites, sensitive fish and wildlife resources, interesting earth science features, and identified lake trout lakes have been recognized throughout the area.

b. Land Use Intent

The major role of this large area is to produce resources that support local industries. A secondary role will be to provide extensive Crown land recreation, cottaging and tourism opportunities for the residents of and travelers through Thunder Bay District.

Service corridors such as the Atikokan to Thunder Bay transmission line and the twinning of the Trans Canada pipeline will continue to be developed in this area.

Within resource operations and land use development, known cultural and natural features of value will be protected and the following identified prime lake trout lakes will be managed with regard to the modified management area policy: Dakota, Tinto, Squeers, Watershed, Myrt, Grouse, Partridge, Ojala, Athelstaine, Atik, Twinhouse, Little Kashabowie, Tilly, North Mawn, Mooseland, Sanctuary, Fallingsnow, Trout, Hood, Gunter, Voltaire, Lac de Iles, Walotka, Home, Elevation, Ross, Wye, Redfox, Little Trout and East Plummes Lakes.

An effort will be made to provide additional cottages on Crown land if demand warrants and private lots are not available. This will be done by lake development plans for Garden, Wawang and Kabitotikwia Lakes.

In the vicinity of Quetico Provincial Park in Atikokan District, resource management and recreational land uses will be guided by the requirements of the approved *Quetico Park Master Plan.*

Lakes which have been identified for their existing tourism potential and for future access control and special management are Clay and Powell, Legris, Survey, Holinshead, Gillard, Whitebirch, McGinness, Moss, Mosher and Bishop Lakes.

An outline of the ongoing activities which are recommended for continuation is given in the Land Use Activity section. It should be realized that in some instances further refinement may be required.

Three (3) identified candidate parks are recommended for park status. As well, one (1) Area of Natural and Scientific Interest has been identified.

c. Land Use Activity for 17.0 - HINTERLAND

Activity	Acceptable		Guidelines
	Yes	No	
Aggregate Extraction	x		Operating guidelines which protect important fish and wildlife habitats, cultural features, recreation and tourism potentials, aesthetic values and other resource concerns will be reflected in quarry and work permits.
Agriculture	x		Use of Crown land for agriculture is limited. The Ministry will consider making Crown land available for agricultural purposes in consultation with the Ministry of Agriculture and Food.
Bait Fishing	x		
Commercial Fishing	x		
Cottaging	x		Disposition of Crown land for cottages will require the preparation of a lake development plan. Lakes designated for cottaging are: Garden, Kabitotikwia and Wawang Lakes.
Crown Land Recreation	x		Existing levels of use may continue if they focus on sites which can sustain use and do not conflict with other resource concerns or uses. As access is developed throughout the District, new access points and campgrounds are expected to be developed by the public. This use will be controlled and managed to minimize environmental impacts and conflicts with other uses.
Forestry	x		Forestry will continue. Operating and annual plans will contain specific guidelines which protect the other resource values of this area, prime lake trout lakes, lakes identified for other uses and important fish and wildlife habitats.
Hunting	x		
Mining	x		Exploration and development will continue. Operating guidelines for protecting tourism and recreation values, other resources and important fish and wildlife habitats will be reflected in licences and work permits.
Provincial Parks	x		17.1 **Recommended for Park Status** 17a. Kaiaskh-Gull Candidate 17b. Whitefish-East Candidate 17c. Fraleigh Lake Candidate 17.2 **Recommended Area of Natural and Scientific Interest:** 17d. Trewartha Township

Activity	Acceptable		Guidelines
	Yes	No	
Roads	x		Roads will be planned and developed to meet the needs of multiple resource extraction operations and will be managed to maintain low intensity public use. Both the access roads policy and the modified management areas policy will be applied to protect tourism opportunities. Prime lake trout lakes and other important fish and wildlife habitats will also be protected through road planning.
Rural Residential	x		Crown land for rural residential use will be made available if no private land is available and the request is supported by the Ministry of Municipal Affairs and Housing.
Sport Fishing	x		Identified prime lake trout lakes are Dakota, Tinto, Squeers, Watershed, Partridge, Ojala, Athelstane, Atik, Twinhouse, Little Kashabowie, Tilly, North Mawn, Mooseland, Sanctuary, Fallingsnow, Trout, Hood, Gunter, Voltaire, Lac des Iles, Walotka, Home Elevation, Ross, Wye, Redfox, Little Trout, Myrt, Grouse and East Plummes Lakes.
Tourism	x		Existing activity will continue and may expand on private land or on Crown land if it does not conflict with other resource uses. Lakes identified as having tourism potential are Clay and Powell, Legris, Survey, Holinshead, Gillard, Whitebirch, McGinness, Moss, Mosher and Bishop Lakes.
Trapping	x		Existing activity will continue and be encouraged to expand to meet the quotas and the target.
Urban Development		x	
Wildlife Viewing	x		
Wild Rice Harvesting	x		

17.1 17a KAIASKH-GULL RIVER CANDIDATE, 17b WHITEFISH LAKE-EAST CANDIDATE AND 17c FRALEIGH LAKE CANDIDATE

a. Area Description

The Kaiaskh-Gull River (230 ha.), Whitefish Lake-East (185 ha.) and Fraleigh Lake (868 ha.) candidates are scattered throughout Area 17.

The candidates provide both earth and life science representation which contributes to the achievement of the provicial parks objectives.

b. Land Use Intent

These areas have been recommended for park status in order to protect the identified earth and life science features.

c. Land Use Activity for 17a - KAIASKH-GULL RIVER, 17b -WHITEFISH LAKE-EAST and 17c - FRALEIGH LAKE CANDIDATES

Activity	Acceptable		Recommended Guidelines
	Yes	No	
Aggregate Extraction		x	
Agriculture		x	
Bait Fishing		x	
Commercial Fishing		x	
Cottaging		x	
Crown Land Recreation		x	
Forestry		x	
Hunting	x		It is recommended that hunting be permitted to continue in the Fraleigh Lake Candidate only.
Mining	x		It is recommended that mineral exploration/extraction be permitted to continue in the Whitefish Lake-East Candidate only.
Provincial Parks	x		
Roads		x	
Rural Residential		x	
Sport Fishing		x	
Tourism		x	
Trapping	x		It is recommended that existing trapping activity be permitted to continue in the Fraleigh Lake Candidate only.
Urban Development		x	
Wildlife Viewing	x		
Wild Rice Harvesting		x	

17.2 17d AREA OF NATURAL AND SCIENTIFIC INTEREST

a. Area Description

The Trewartha area (3,065 ha.) located north of Highway 17 in the western portion of the District has been identified as an Area of Natural and Scientific Interest. The site represents life science features.

b. Land Use Intent

The area is being evaluated for its potential as a source for commercial peat extraction. Should these assessments indicate that the potential for commercial utilization is low, the area will be re-examined relative to possible park status.

E: application

1. METHODS OF APPLICATION

Application of the *Thunder Bay District Land Use Guidelines* will be accomplished through regular programs and activities of this Ministry such as:

- the planning and approval of specific Ministry development projects;
- the input to, and review of, municipal official plans, zoning by-laws, plans of subdivision, consent applications and zoning orders under the *Planning Act;*
- the review of specific development proposals by other proponents on both Crown and private land;
- the selective application of restricted area orders, under the *Public Lands Act* in areas without municipal organization;
- through specific conditions e.g. road and modified management area guidelines, incorporated in permits, licences, leases, easements, etc., issued under the authority of various provincial acts, e.g. the *Public Lands Act,* the *Mining Act,* the *Crown Timber Act,* etc.;
- liaison and cooperation with other Government Ministries and agencies, Ministries of Transportation and Communication, Environment, Tourism and Recreation, Northern Affairs, Municipal Affairs and Housing and Conservation Authorities; and,
- education and extension programs with private land owners, municipalities; and interest groups.

It is not intended that all targets would be achieved immediately. The intent is to aim for that level of achievement over the next 20 years.

In the event of conflict between previous Ministry plans prepared for the Thunder Bay District and the 1983 *Thunder Bay District Land Use Guidelines*, the latter will take precedence. In the future the *Land Use Guidelines* may be modified to reflect new information and changing circumstances.

2. RESOURCE MANAGEMENT PLANS

Ministry land use guidelines essentially indicate where certain activities might be carried out on Crown land and under what general conditions. Resource management plans, e.g. forest management and operating plans, indicate how a specific activity will be carried out in the specified area and how other land uses will be considered.

All Ministry resource management plans must have due regard for the intent of the approved *Land Use Guidelines.*

3. MUNICIPAL PLANNING

The *Land Use Guidelines* have no legal status. The control of land use on private land in municipalities is exercised by municipalities or the Minister of Municipal Affairs and Housing under the authority of the *Planning Act.*

The Ministry recognizes that private landowners, other government agencies, municipalities, conservation authorities and interest groups are key partners in any effort to achieve effective and integrated resource management. The Ministry of Natural Resources will continue to work with these groups, especially with municipalities through the Ministry's plan input and review program to ensure that natural resource values are considered in local planning documents. The *Thunder Bay District Land Use Guidelines* may serve as one of the sources of information for Ministry involvement in the municipal planninig process.

Where the *Land Use Guidelines* indicate the Ministry wishes to influence particular land uses on private land in organised municipalities in order to work towards the achievement of Ministry objectives, this will be undertaken in consultation with municipal officials and private landowners. At this time the needs of other users will be taken into consideration.

There will be occasions when the Ministry feels that certain land uses or proposed developments on private land, while in conformity with municipal planning documents, will have a negative impact on Ministry programs or interests. In such situations the Ministry will attempt to resolve the situation through discussions with the proponent, the municipality and MMAH. If the Ministry is not satisfied with the results of the negotiations they may consider taking further action under the procedures provided for by the *Planning Act* and in accordance with MNR policy.

In municipalities containing Crown land there could be situations where municipal planning documents may or may not permit different land uses on Crown land than those that are indicated as acceptable on Crown land in the *Land Use Guidelines*. Where this happens, and it appears that a possible land use conflict might arise, the Ministry will consider taking further action under the procedures provided for by the *Planning Act*.

4. OTHER GOVERNMENT AGENCIES

In addition to providing internal direction for the integration of Ministry programs, the *Land Use Guidelines* are also useful in highlighting to the public, other agencies and levels of government what the varied responsibilities of MNR are and will serve as the basis for Ministry participation in the land use planning of others. The Ministry will work closely with other agencies and groups when carrying out its programs. In some instances, other agencies may assist the Ministry with application of the *Land Use Guidelines*.

There will also be occasions where the Ministry and others, another government agency, for example, will have different intentions for the same area. When such situations are identified, the Ministry will enter into negotiations with the other agency to arrive at an acceptable solution.

5. APPLICATION OF RESTRICTED AREA OR ZONING ORDERS

a. Under the *Public Lands Act*

In areas without municipal organization, the Ministry of Natural Resources may apply a restricted area order under Section 13 of the *Public Lands Act* to control land use on private land when it is considered that a specific use(s) would or may impact adversely on Ministry programs.

b. Under the *Planning Act*

In areas without municipal organization the Minister of Municipal Affairs and Housing may apply a zoning order under the *Planning Act*. Such orders have a purpose and effect similar to zoning by-laws prepared by councils in organized municipalities.

In addition to the input to and review of these orders, the Ministry of Natural Resouces might request the imposition of an order by MMAH or amendment to an existing order.

APPENDICES

A: public consultation

TABLE A-1 SUMMARY OF PHASE I: BACKGROUND INFORMATION

Open Houses

Location - Lakehead Labour Centre
Thunder Bay, Ontario

Dates - March 27 and 28, 1982

Announcements - Newspaper ads - Lakehead Living, Canadian Uutiset, Chronicle-Journal, Times-News
- News releases sent to mailing list
- Letters of invitation
- Phase I report sent to interest groups and libraries

Attendance - 300 people (total for both days)

Meetings

Dorion residents
Upsala residents
Northern Light Lake Campers Association
Abitibi-Price Inc.
Great Lakes Forest Products
Shebandowan Campers Association

Public Input

Mailing list - 382
Background Information reports distributed - 660
Written submissions received - 86

TABLE A-2 SUMMARY OF PHASE II: OPTIONAL PLANS

Open Houses

Location - Ontario Government Building
Thunder Bay, Ontario

Dates - June 11 and 12, 1982

Attendance - 500 people (total for both days)

Advertising - Posters
- **Newspaper Ads**
- **Radio**
- **TV open line show**

Meetings

June 2/82 - Northern Light Lake Campers Association
- **discussed access points, road location, signs and spraying**
- **distributed 20 Phase II Tabloids**
- **20 and 25 people in attendance**

June 7/82 - North Shore Citizen's Committee for Responsible Forest Management
- **discussed local user policy for timber (Black Bay Penninsula) allocation of wood to Buchanan Forest Products Ltd.**
- **16 people in attendance**

June 15/82 - Highway 588 Tourist Association
- **discussed access points, calcium on Northern Light Lake Road, limits on fish, hunters and candidate parks**
- **distributed Phase II Tabloid**
- **10 operators in attendance**

Public Input

Mailing list - 819
Tabloids distributed - 4000
Written submissions received - 473 (see breakdown in Tables A-3, A-4 and A-5)

TABLE A-3 SUMMARY OF COMMENT RECEIVED TO PHASE II BY TYPE

Type	Before Deadline (July 15, 82)	After Deadline (July 15 - Nov. 1/82)
Letters	158	46
Comment Sheets	186	34
Petitions (see list)	4 (3,912 names)	4 (4,570 names)
Briefs (see list)	1	3
Maps	4	0
Meeting Minutes	3	2
File Memos	16	3
TOTAL	381	92

Petitions

Before Deadline	
Jacalyn Duffin	50 names
Robert Whiteside	3,600 names
Eleanor Johnson (Girl Guides)	205 names
Truck Drivers (comment sheets)	57
After Deadline	
Illinois Residents	14 names
Robert Whiteside (additional)	250 names
Parks for Tomorrow	1239 names
Lumber & Sawmill Workers	3,067 names

Briefs

Before Deadline - Belore Mines
After Deadline - Parks for Tomorrow (2)
Locomotive Society

The following tables illustrate the number of submissions received from each representative category and their origins. In addition, copies of all comments received are available for viewing in the District Office, the Ministry's Main Office public reading room and the Legislative Library at Queen's Park.

TABLE A-4 SUMMARY OF PUBLIC COMMENT TO PHASE II BY REPRESENTATIVE CATEGORY (JULY 15, 1982)

Input(1) Received by Representative Category and Origin Thunder Bay District Land Use Plan (Phase II)	District Planning Area	Northwest Planning Area	Provincial	Other	Total
1. Members of Parliament	0	0	0	0	0
2. Advisory Committees (where applicable)	n/a	n/a	n/a	n/a	n/a
3. Agricultural Industry	0	0	0	0	0
4. Anglers & Hunters Association/Groups	1	0	0	0	1
5. Commercial Fishing Industry	0	0	0	0	0
6. Conservation Authorities	0	0	0	0	0
7. Environmental/Parks Associations/Groups	1	0	1	0	2
8. Forest Industry	2	0	0	0	2
9. Government Agencies (including Ontario Hydro)	1	7	1	1	10
10. Individual Residents	384	1	0	0	385
11. Mining Industry	0	0	6	0	6
12. Municipalities (including Chamber of Commerce)	2	1	0	0	3
13. Native Organizations/ Groups	0	1	0	0	1
14. Tourist Industry	9	0	0	0	9
15. Trapping Industry	1	0	0	0	1
16. Other (non-aligned groups)	8	2	2	0	12
TOTAL	409	12	10	3	432

(1) Includes all comment sheets, briefs, letters, memos to file, etc.

TABLE A-5 SUMMARY OF PUBLIC COMMENT TO PHASE II BY REPRESENTATIVE CATEGORY (JULY 15 - NOVEMBER 1, 1982)

Input(1) Received by Representative Category and Origin Thunder Bay District Late Submissions	District Planning	Northwest Planning	Provincial	Other	Total
1. Members of Parliament	0	0	0	0	0
2. Advisory Committees (where applicable)	n/a	n/a	n/a	n/a	n/a
3. Agricultural Industry	0	0	0	0	0
4. Anglers & Hunters Associations/Groups	1	0	0	0	1
5. Commercial Fishing Industry	0	0	0	0	0
6. Conservation Authorities	1	0	0	0	1
7. Environmental/Parks Associations/Groups	2	1	1	0	4
8. Forest Industry	2	0	0	0	2
9. Government Agencies (including Ontario Hydro)	0	3	3	4	10
10. Individual Residents	49	3	2	4	58
11. Mining Industry	0	0	1	0	1
12. Municipalities (including Chamber of Commerce)	1	0	0	0	1
13. Native Organizations/ Groups	0	0	0	0	0
14. Tourist Industry	1	1	0	0	2
15. Trapping Industry	0	0	0	0	0
16. Other (non-aligned groups)	2	1	3	3	9
TOTAL	57	9	7	4	89

(1) Includes all comment sheets, briefs, letters, memos to file, etc.

B: identified prime lake trout lakes

Definition: Prime lake trout lakes are lakes in which the fisheries resource will be managed to sustain the lake trout population as a primary component of the fish community.

The following list of lakes are identified prime lake trout lakes:

Abigogami
Arrow
Athelstane
Atik
Baril
Burchell
Burnt Island
Camp (Little Kashabowie)
Dakota
East Plummes
Elevation
Fallingsnow
Fork
Greenwater
Greenwich
Grouse
Gunter
Home
Hood
Huronian
Icarus
Innes
Kamikau
Lac des Iles
Little Moraine
Little North
Loch Erne
Loch Lomond
MacIntosh
Miner
Mooseland
Moraine
Mowe
Myrt
North
North Mawn
Northern Light
Oliver
Partridge
Redfox
Ross
Rudge
Sanctuary
Sandstone
Silver (Sheen)
Squeers
Stetham
Sunbow
Sunset
Tilly
Tinto
Titmarsh
Twinhouse
Uneven
Voltaire
Wabindon
Watershed
Windigoostigwan
Wye
Yellowhammer
Gneiss
Gunflint
Little Gunflint
Little Trout
Magnetic
Moose
Mountain
Ojala
Rose
Saganaga
Scarp
South
Sunbeam
Trout (near Bemar)
Walotka

Total number of identified prime lake trout lakes - 75

C: identified tourism lakes

Definition: Tourism lakes are lakes selected to provide opportunities primarily for commercial tourism, developments such as lodges, outpost camps, etc.. These lakes will be managed according to the access roads and the modified management areas policies.

The following list of lakes are identified tourism lakes:

Clay and Powell
Legris
Gridiron
Sassafras
Rude
Survey
Hilltop
Holinshead
Pyramid
Kearns
Holly
Bishop
Gillard
Dora
Stonehouse
Tommyhow
Whitebirch
Mountairy
McGuinness
Moss
Grew
Loganberry
Mosher

Total number of identified tourism lakes - 23

D: cottaging lakes

A number of lakes have been identified as having potential for cottaging. As the demand dictates, management plans will be developed in order that cottage lots may be made available for private summer resort use.

The following lakes will be planned for cottage development as demand warrants:

Pakashkan
Wawang
Wolf
Dog
Lac des Mille Lacs
Nelson
Marks
Iron Range
Bedivere
Crayfish
Poshkokogan
Rinker
Edmundson
McLeish
Max
Mawn
Decourcey
Starnes
Garden
Kabitotikwia
Swallow
Hoof
Perching Gull (McGrath, Chambers, Blunder)
Weikwabinonaw

Total number of identified cottaging lakes - 24

E: forest management agreements

The Ministry's forestry program is one of the major means of implementing the government's commitment to strong economic development in Ontario. The forest management agreements (FMA) were developed to ensure a productive forest land base in perpetuity for the long-term health of the forest products industry. As with parks system planning, there is a relationship between these agreements and land use planning.

At present the Ministry has executed six forest management agreements. The Spruce River Forest Management Agreement with Abitibi-Price Inc. lies in Thunder Bay District. Background work has begun on a number of other agreements. It is planned that, over the next five to seven years, the bulk of the land base presently under licence to the nine major forest companies will be subject to forest management agreements.

The Ministry undertook a review of the FMA process in 1981 which allowed it to make some technical adjustments. The review revealed that the processes used to deal with land use issues arising from FMA's are generally sound and provided the opportunity to involve the public in the process.

When land use plans are in place, they will provide the base from which FMA's will be developed. For the FMA which has been completed during 1982, prior to the completion of district land use guidelines, district staff developed a general land use map covering the FMA area.

This land use map shows those areas of the existing licence where forestry operations will be generally permitted. It also indicates where, to ensure the continuing success of resource management programs, forestry operations may be restricted (e.g. caribou range) and where they may be prohibited (e.g. shoreline reserves along canoe routes).

The map was be developed from direction provided by the strategic land use plan, the information provided through the district land use planning process to date and Ministry staff's general knowledge of the area. It will provide the basis for negotiation with the company for areas to be excluded from the FMA or subject to special management prescriptions.

The FMA area, together with maps and relevant background data was made available for public review and comment. After public review and comment, the Ministry and the company undertook any necessary revisions to the FMA area.

GLOSSARY

Back Country Recreation
This includes canoe tripping and backpacking in remote areas, accessible only on foot, or by manually powered water craft.

Candidate Park
An area designated in the Ministry of Natural Resources land use guidelines which may be given official status as a park at some time in the future.

Capability
The natural ability of an area to provide continuous opportunity for benefits under an assumed level of management.

Capacity
The upper limit to which an area of land, or water, may be used or developed without an undesirable change taking place in the environment. Also called carrying capacity.

Commercial Fishing
The taking for sale of fish other than game fish, by means of any hook-line, gill-net, hoop-net, pound-net, seine-net, trammel-net, trap-net or trawl-net.

Crown land
All land (including land under water) held by the Province, both land which has never been sold and land which has been reacquired.

Earth Science Theme
A group of associated geological and geomorphological landforms and processes related by geological time, the method of formation and the environment in which they were formed.

Furbearers
Animals having commercially valuable pelts including beaver, mink, marten, otter, muskrat, fox, raccoon, wolf and lynx.

Geological Environment
A discrete period of time characterized by distinctive geological and geomorphological processes, climate conditions and plant and animal life or its absence which is represented by identifiable features on or below the earth's surface.

Goal
A general purpose to which the Ministry aspires.

Habitat
The place or type of site where an animal or plant naturally or normally lives.

Hazard Land
Land, which because of its physical characteristics in combination with its location presents a risk to its occupants including loss of life, property damage and social disruption.

Historical Theme
A common activity or procedure involving a substantial portion of the contemporary population within a defined time span and geographic area.

Historical Theme Segment
A theme segment represents an important phase of a distinctive activity which took place in a specific time and place within Ontario.

Integrated Resource Management
The coordination of resource management programs to ensure that conflicts are minimised and that management which would benefit several programs is encouraged. Integrated management encourages multiple use, but recognises that in some circumstances management of areas for a single purpose may be necessary.

Lake Productivity
The rate of fish production in a waterbody determined largely by nutrient and energy inputs and exploitation levels.

Land Use Guidelines
A document which displays decisions concerning the use of land and water in a defined area. It identifies where and how the Ministry can achieve its objectives in a specific District through the use of Crown land and through influencing the use of private land.

Land Use Planning
A process which culminates in a direction regarding the use of land.

Life Science Theme
An undisturbed area that contains a viable system of environments, biotic-communities, plants and animals characteristic of or unique to a natural region of Ontario.

Management
The judicious use of means to achieve ends. Management may have various levels of intensity.

Mining Rights
The right to work the ores and minerals on or under any land. These may be granted separately from surface rights.

Multiple Use
A resource management or planning concept applied to very large areas to indicate that all basic uses are accommodated. Typically, two or more uses may occur on the same general area at the same time or in sequence.

Objective
A quantifiable end result to be achieved.

Opportunity
A measure of recreation supply. It is used to describe the number of times a resource or facility can be used (occasions of use) in a given time period. An opportunity is considered not to be greater than one day.

Optimum Sustainable Yield
The concept refers to the maximum level of resource harvest which can be sustained on a long-term basis without causing detrimental effects on the resource base.

Policy
A decision concerning the objectives to be achieved and the means of achieving them.

Productive Forest Land
An area dedicated to the growing of merchantable timber or the production of other forest products.

Program
An activity undertaken by the Ministry to provide a service or manage a particular resource.

Resource Management
The control and coordination of the uses of resources to achieve specific ends. Commonly applied in particular to natural resources.

Resource Management Plan
A plan by which the policies, objectives and targets usually of an individual program (except in the case of an integrated resource management plan) are implemented for a specific resource.

Sequential Use
Where one use is followed by another in planned sequence.

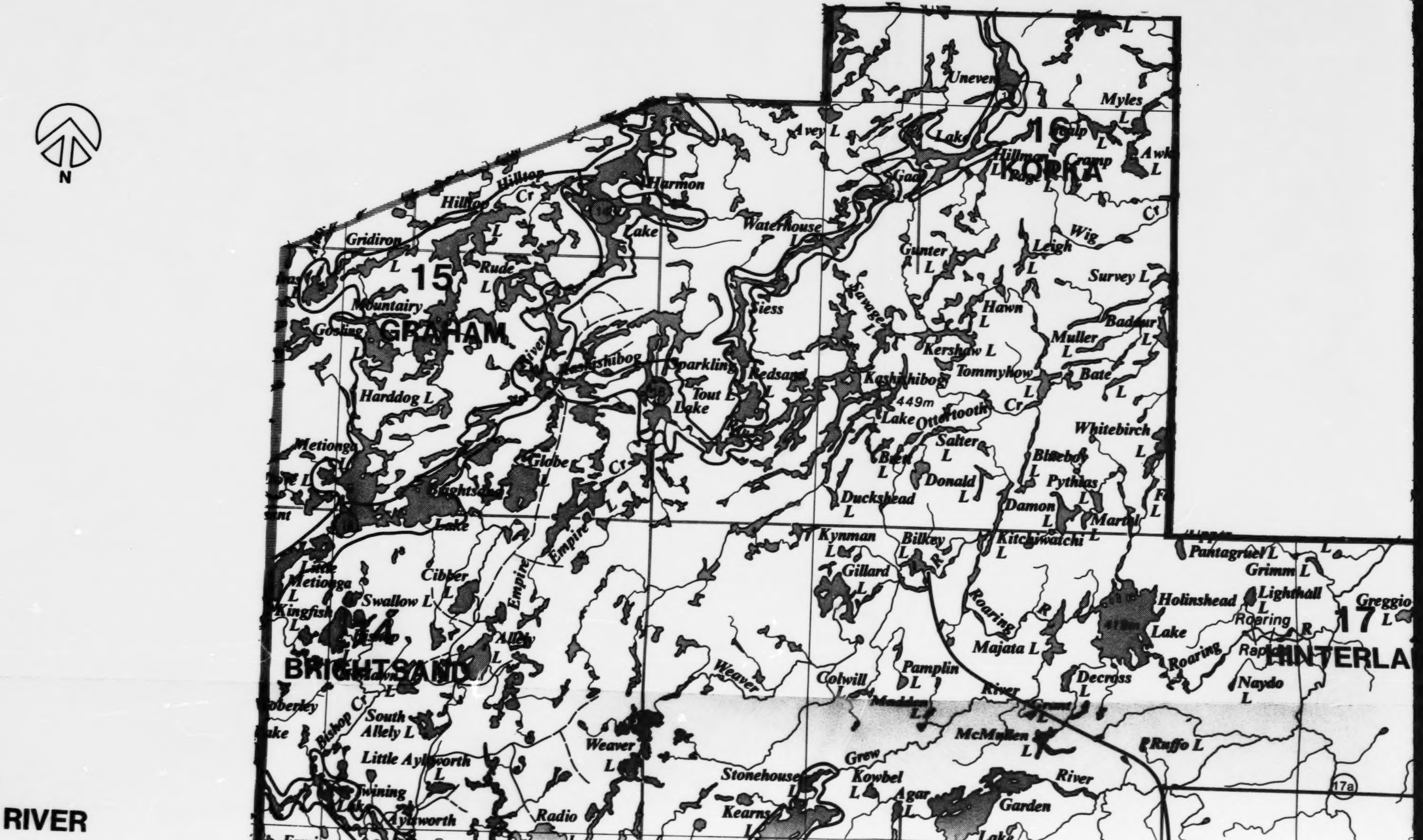
Sport Fish
For the purpose of this document sport fish are the top predator species sought after by anglers.

Strategy
Planned actions or measures to achieve a desired end.

Target
A quantified end to be achieved or completed by a specific date.

Wetland
Land which is permanently or seasonally covered with shallow water and where distinctive soil conditions, plant and wildlife communities develop. These include wetland forests (swamps), wetland thickets, marshes, bogs and fens.

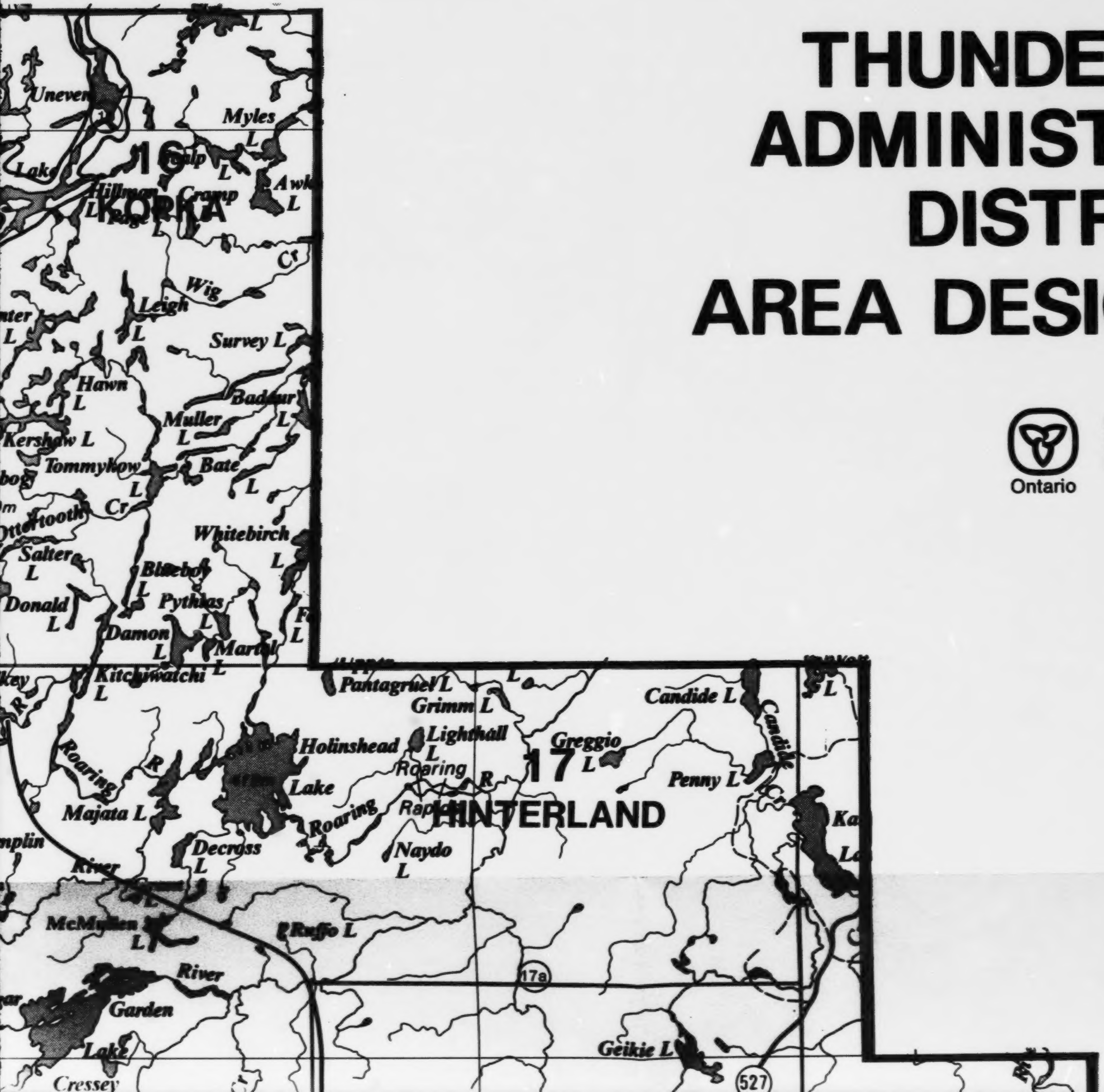
Work Plan
A plan prepared annually which defines what management activities are to be undertaken for that year.


N
15
GRAHAM
16
KORKA
14
BRIGHTSAND
17
HINTERLA
Uneven Lake
Myles L
Avey L
Hillman L
Cramp L
Awk L
Hilltop L
Hilltop Cr
Harmon Lake
Gridiron L
Waterhouse L
Gunter L
Leigh L
Wig Cr
Survey L
Rude L
Mountairy
Gosling
Siess
Savage L
Hawn L
Badour L
Muller L
River
Kashishibog Lake
Sparkling
Redsand
Tout L
Kershaw L
Tommyhow Cr
Bate L
449m
Ottertooth Cr
Harddog L
Metionga
Globe L
Cr
Knightsand Lake
Salter L
Brett L
Donald L
Whitebirch L
Bluebay L
Pythias L
Duckshead L
Damon L
Martel L
Empire
Kynman L
Gillard L
Billkey L
Kitchiwatchi L
Pantagruel L
Grimm L
Lighthall L
Greggio L
Little Metionga L
Cibber L
Swallow L
Kingfish L
Bishop L
Allely L
Roaring R
Holinshead Lake
411m
Roaring Rapids
Majata L
Decross L
Naydo L
Weaver
Colwill L
Pamplin L
Madden L
River
Grant L
Oberley Lake
Bishop Cr
South Allely L
McMullen L
Ruffo L
Little Aylsworth L
Weaver L
Grew
Twining Lake
Stonehouse L
Kowbel L
Agar L
River
17a
Aylsworth
Radio
Kearns L
Garden Lake

10
ENGLISH RIVER

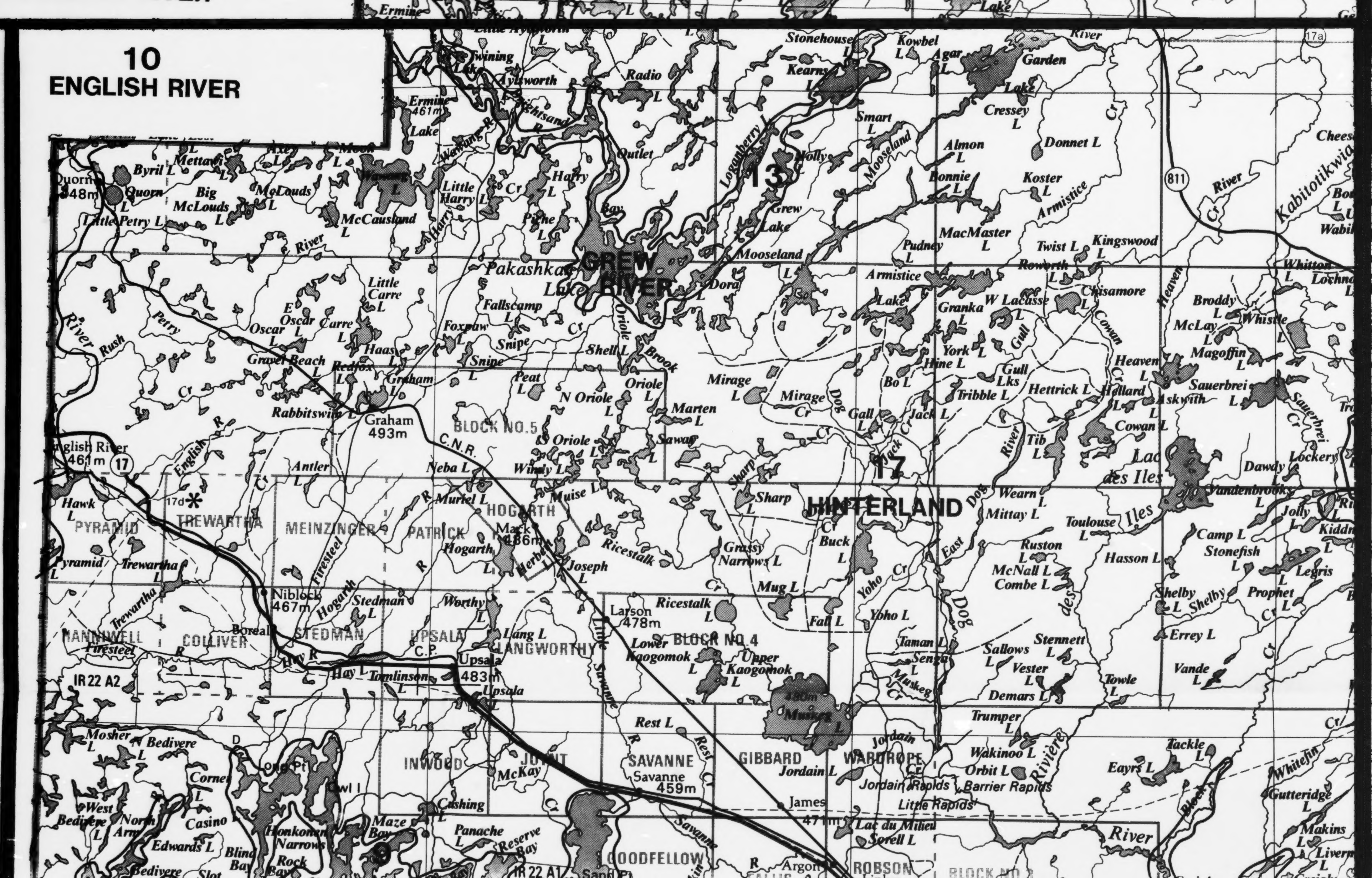
THUNDER BAY ADMINISTRATIVE DISTRICT AREA DESIGNATION

Ministry of
Natural
Resources
Ontario

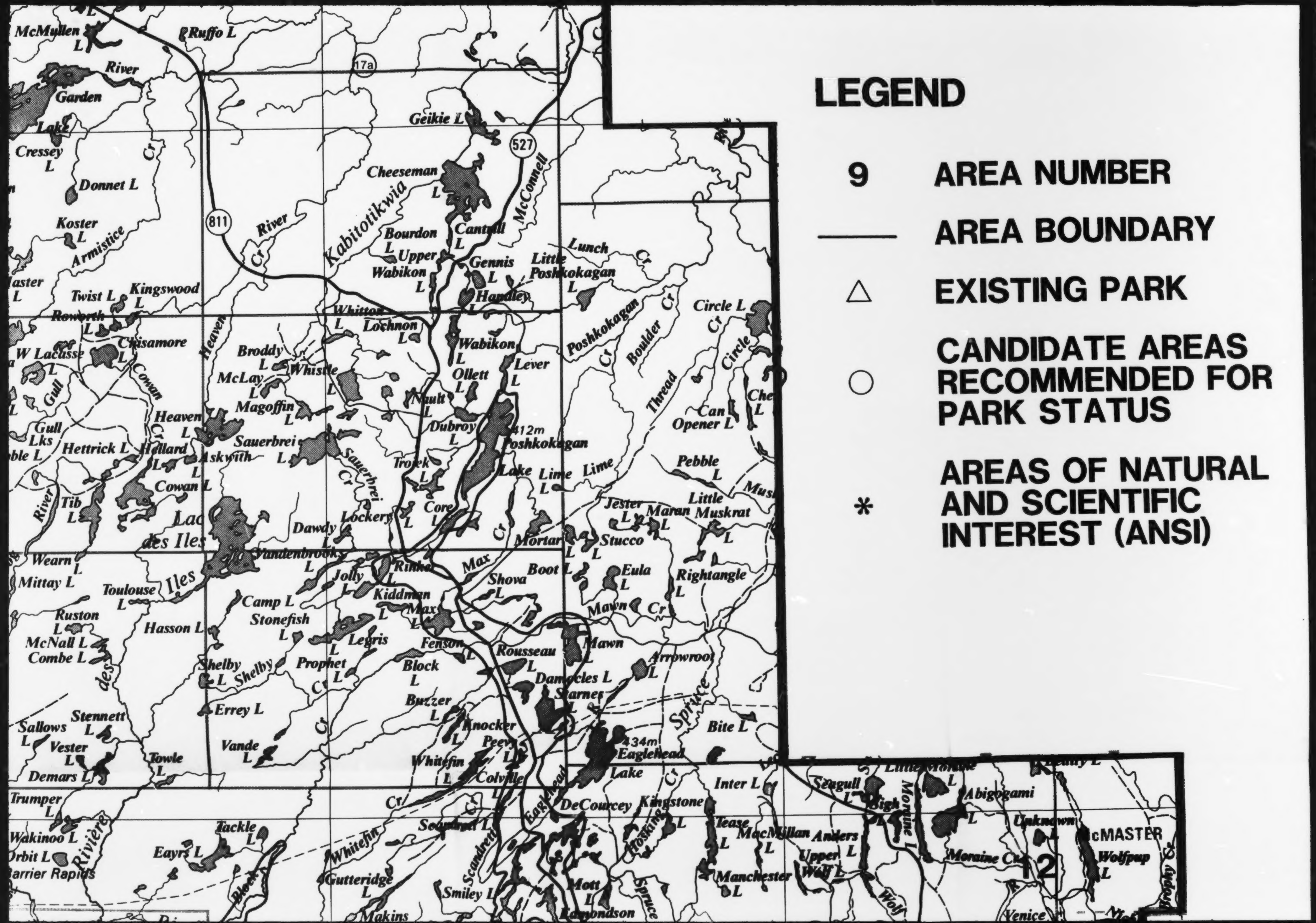

Uneven
Myles L
16
Lake
Hillman L
Cramp L
Awk L
KORKA
Page L
Cr
Wig
Leigh L
Survey L
Hawn L
Badour L
Muller L
Kershaw L
Tommyhow L
Bate L
Cr
Ottertooth
Whitebirch L
Salter L
Bluebox L
Pythias L
Donald L
Damon L
Martel L
Kitchiwatchi L
Pantagruel L
Grimm L
Candide L
Lighthall L
Holinshead Lake
17
Greggio L
Roaring R
Penny L
Candide Cr
HINTERLAND
Roaring R
Majata L
Roaring
Rapids
Decross L
Naydo L
River
McMullen L
Ruffo L
River
Garden Lake
17a
Geikie L
527
Cressey

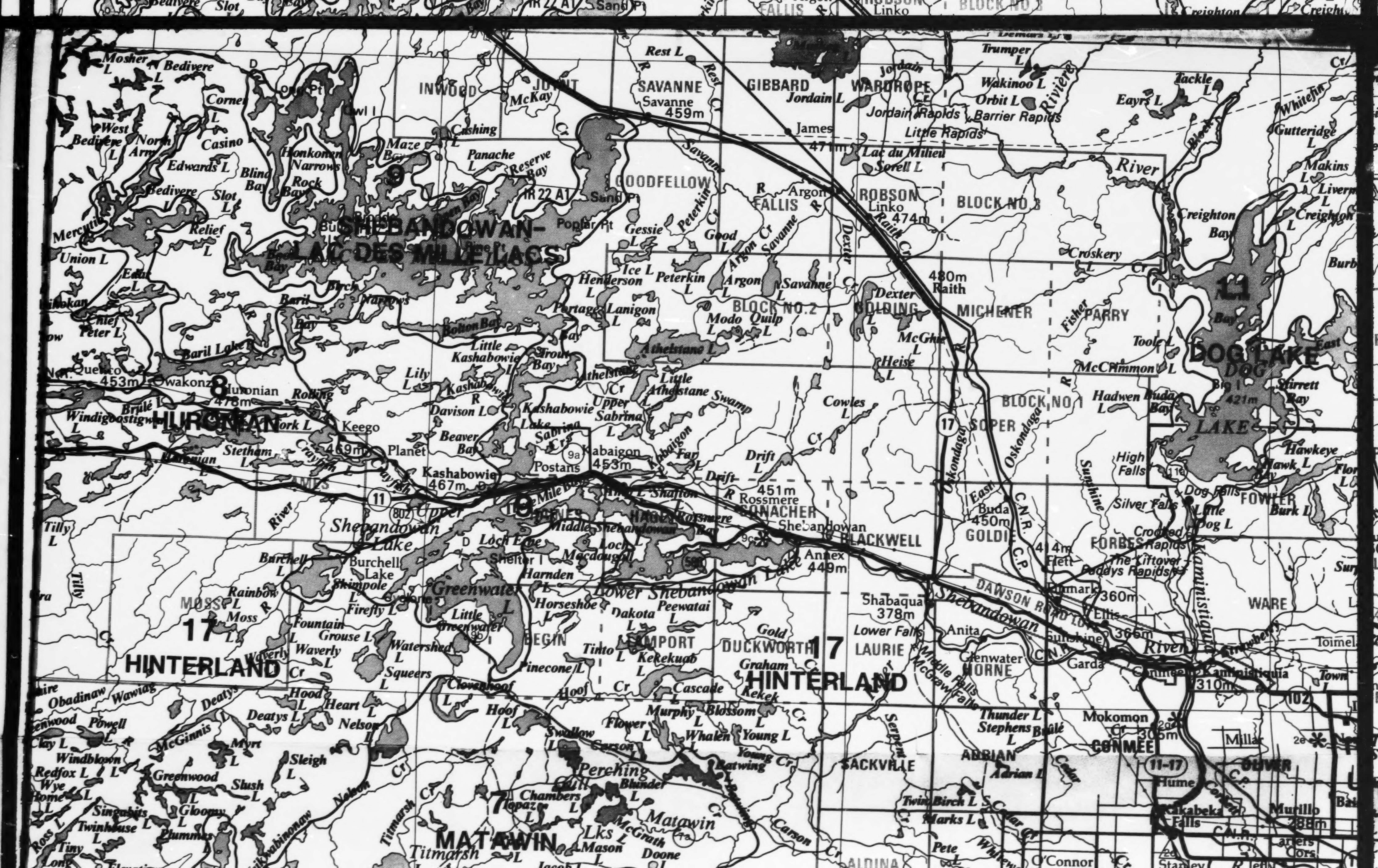
LEGEND

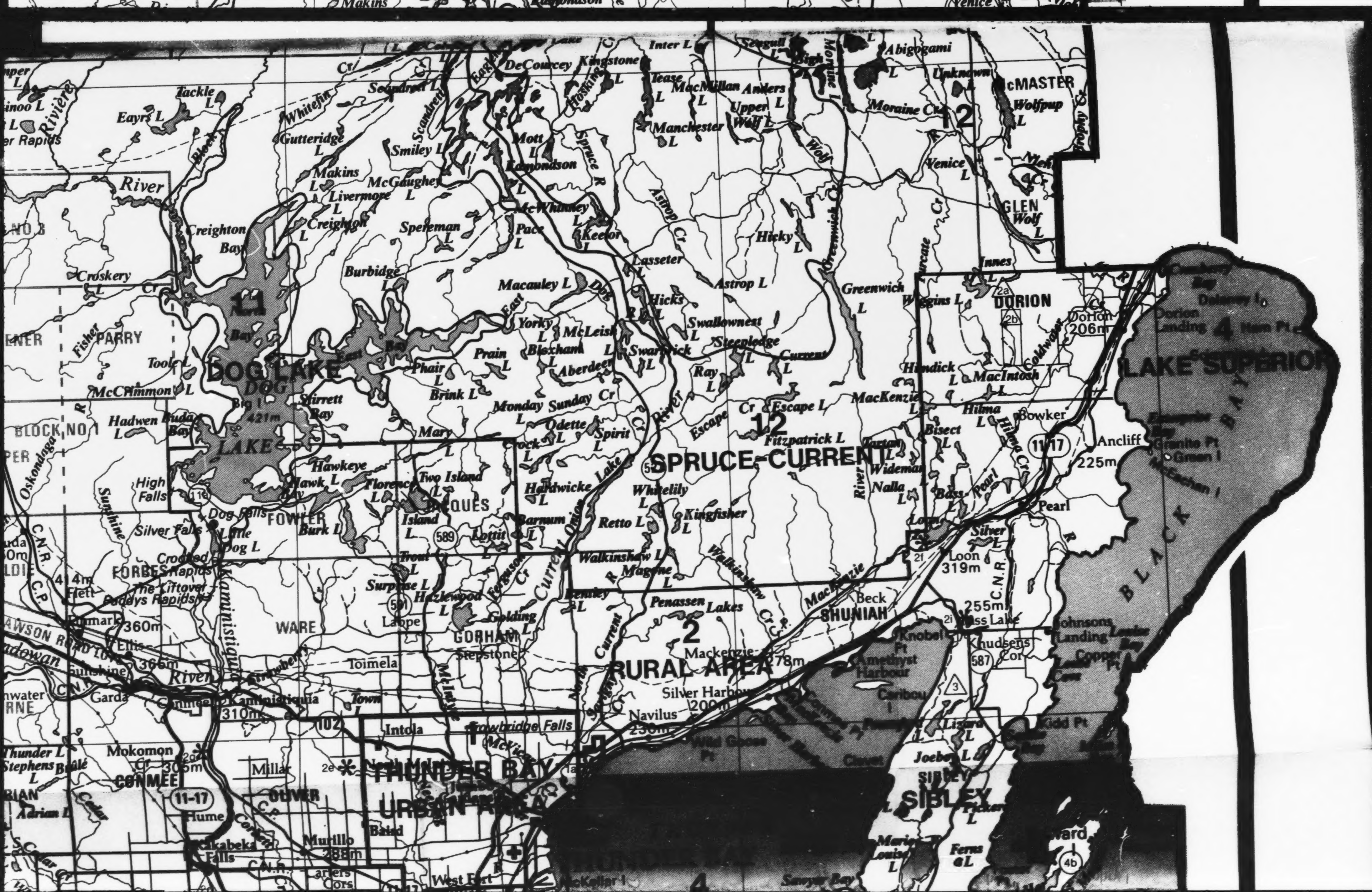
10
ENGLISH RIVER



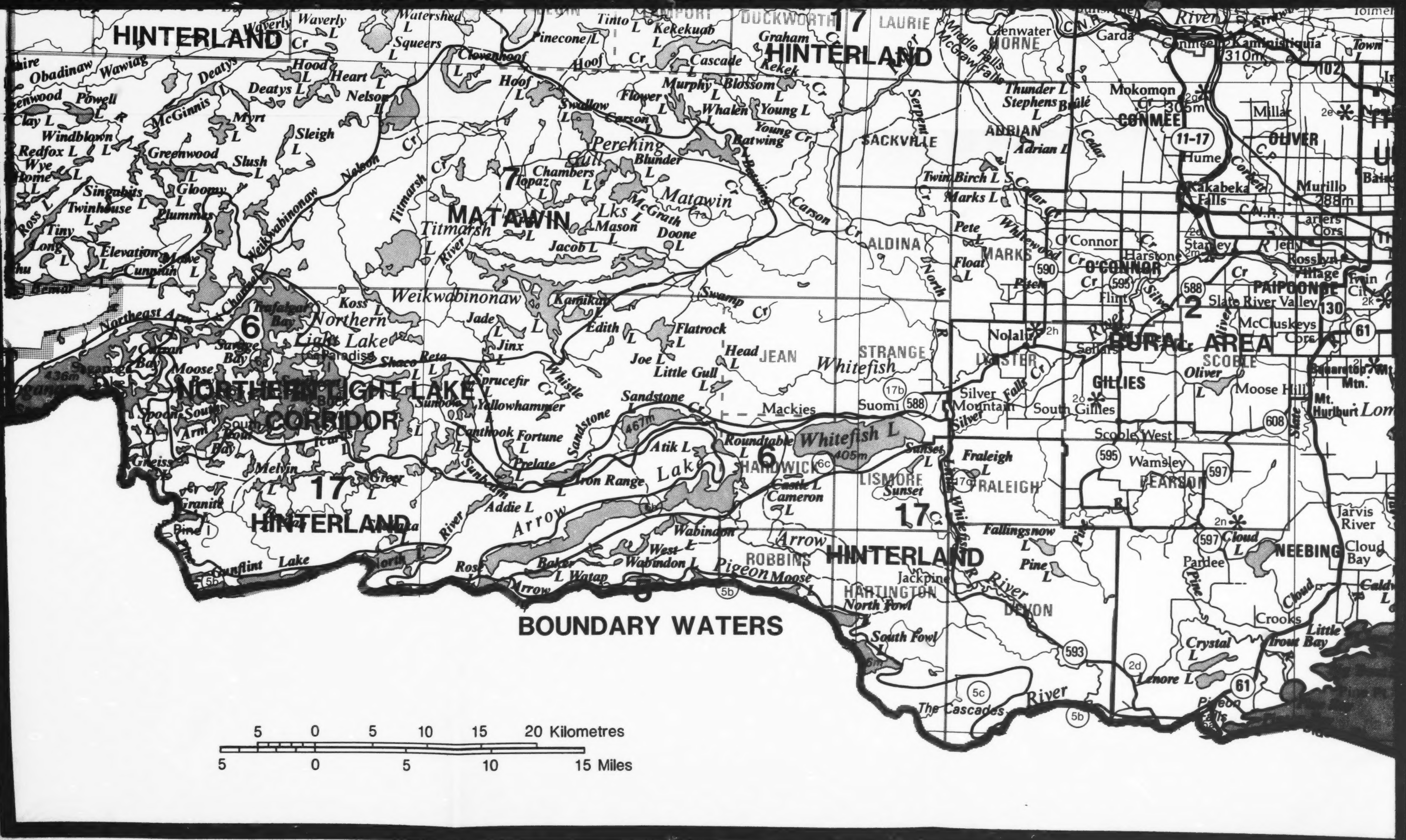
Ermine
Lake
Little Aylsworth L
Twining Lake
Aylsworth
Radio
Stonehouse L
Kearns L
Kowbel L
Agar L
Garden
Lake
River
17a
Ermine 461m
Lake
Nightsand
Wewang R
Smart L
Cressey L
Cr
Donnet L
Cheese
Axe L
Moon L
Byril L
Mettawa
Quorn 448m
Quorn L
Big McLouds L
McLouds L
Wawang L
Little Harry L
Cr
Harry L
Outlet
Loganberry L
13
Holly
Mooseland
Almon L
Bonnie L
Koster L
811
River
Kabitotikwia
Cr
Armistice
Little Petry L
McCausland L
Harry
Pine L
Bay
Grew Lake
Pudney L
MacMaster L
Twist L
Kingswood L
Wabil
River
GREW RIVER
Mooseland
Pakashkan Lake
Dora L
Armistice Lake
Roworth L
Chisamore
Heaven
Whitton L
Lochna
Little Carre L
E Oscar L
Carre L
Oscar L
Fallscamp L
Oriole
W Lacasse L
Granka L
Broddy L
McLay L
Whistle
Rush
River
Petry
Foxpaw L
Haas L
Snipe
Cr
Shell L
Brook
Gull
Cowan
Magoffin L
Gravel
Beach
Redfox L
Graham
Snipe L
Peat L
Mirage L
Mirage Cr
York L
Hine L
Gull Lks
Heaven L
Hellard L
Sauerbrei L
Cr
N Oriole L
Oriole L
Marten L
Dog
Bo L
Tribble L
Hettrick L
Askwith L
Sauerbrei
Cr
Rabbitswim L
Graham 493m
BLOCK NO.5
Gall L
Jack L
Cowan L
English River 461m
17
English R
R
Antler L
C.N.R.
Oriole L
Sawaya L
Windy L
Sharp
Cr
Jack Cr
River
Tib L
Lac des Iles
Dawdy L
Lockery
17
Neba L
17d
Muriel L
HOGARTH
Muise L
Sharp L
HINTERLAND
Dog
Wearn L
Mittay L
Vandenbrook L
Jolly L
Hawk L
PYRAMID
TREWARTHA
MEINZINGER
PATRICK
Mack 486m
Hogarth L
Herbert L
Ricestalk
Grassy Narrows L
Cr
Buck L
East
Ruston L
Toulouse L
Iles
Camp L
Stonefish L
Kiddn
Pyramid L
Trewartha L
Firesteel
R
Joseph L
Yoho Cr
McNall L
Combe L
Hasson L
Legris
Trewartha
Niblock 467m
Hogarth
Stedman L
Worthy L
Cr
Mug L
Dog
des
Shelby L
Shelby
Prophet L
Cr
Larson 478m
Ricestalk L
Fall L
Yoho L
HANNIWELL
COLLIVER
Boreal
STEDMAN
UPSALA
C.P.
Lang L
LANGWORTHY
Little Savanne
Lower Kaogomok L
BLOCK NO.4
Upper Kaogomok L
Taman L
Senga L
Sallows L
Stennett L
Vester L
Errey L
Firesteel
R
Hay R
Hay L
Tomlinson L
Upsala 483m
Upsala L
Musky Cr
Demars L
Towle L
Vande L
IR 22 A2
480m
Muskeg L
Rest L
Trumper L
Cr
Mosher L
Bedivere L
D
R
Rest Cr
Jordain
Tackle L
Long Pt
Corner L
INWOOD
JOHNT
SAVANNE
Savanne 459m
GIBBARD
Jordain L
WARDROPE
Cr
Wakinoo L
Orbit L
Rivière
Eayrs L
Whitefin
Owl I
McKay
Jordain Rapids
Barrier Rapids
Gutteridge L
West Bedivere L
North Arm
Casino
Cashing L
James 471m
Little Rapids
Block
Honkonen Narrows
Maze Bay
Panache L
Savanne
Lac du Milieu
Sorell L
River
Makins L
Edwards L
Blind Bay
Rock Bay
9
Reserve Bay
Cr
Liverm
Bedivere
Slot
IR 22 A1
Sand Pt
GOODFELLOW
R
Argon
ROBSON
BLOCK NO 2


LEGEND
9 AREA NUMBER
AREA BOUNDARY
△ EXISTING PARK
○ CANDIDATE AREAS RECOMMENDED FOR PARK STATUS
* AREAS OF NATURAL AND SCIENTIFIC INTEREST (ANSI)
Cressey
527
McMullen L
Ruffo L
River
17a
Garden Lake
Geikie L
527
Cressey L
Donnet L
Cheeseman L
McConnell
Kabitotikwia River
811
Koster L
Armistice
Bourdon L
Cantrill L
Upper Wabikon L
Gennis L
Little Poshkokagan L
Lunch Cr
Handley
Twist L
Kingswood L
Roworth L
Whitton L
Lochnon L
Circle L
Chisamore L
W Lacasse
Broddy L
Heaven
Wabikon L
Poshkokagan Cr
Boulder Cr
Circle
Gull
Cowan
McLay L
Whistle
Ollett L
Lever L
Thread
Magoffin L
Nault
Can Opener L
Heaven L
Gull Lks
Hettrick L
Holland L
Askwith
Sauerbrei L
Dubroy L
412m
Poshkokagan Lake
Sauerbrei Cr
Trotek L
Lime L
Lime
Pebble L
Cowan L
River
Tib L
Lac des Iles
Core L
Lockery L
Jester L
Maran L
Little Muskrat L
Dawdy L
Mortar L
Stucco L
Vandenbrook L
Wearn L
Mittay L
Iles
Toulouse L
Jolly L
Rinke
Max
Shova L
Boot L
Eula L
Rightangle L
Kiddman L
Max L
Camp L
Stonefish L
Mawn Cr
Ruston L
Hasson L
McNall L
Combe L
Legris L
Fenson L
Rousseau L
Mawn L
Arrowroot L
Shelby L
Shelby
Prophet L
Block L
Damocles L
Starnes L
des
Cr
Errey L
Buzzer L
Spruce
Stennett L
Sallows L
Vester L
Knocker L
Peevy L
Bite L
434m
Eaglehead Lake
Vande L
Towle L
Demars L
Whitefin L
Colville L
Inter L
Seagull
High L
Moraine
Little Moraine L
Abigogami L
Trumper L
Cr
Eaglehead
DeCourcey L
Kingstone L
Tease L
Scandrett L
Scandrett Cr
Hoskins Cr
MacMillan L
Anders L
Unknown L
McMASTER
Wolfpup L
Wakinoo L
Tackle L
Orbit L
Eayrs L
Rivière
Whitefin
Upper Wolf L
Moraine Cr
12
Barrier Rapids
Block
Gutteridge L
Manchester L
Brophy Cr
Smiley L
Mott L
Spruce
Wolf
Makins
Edmondson
Venice

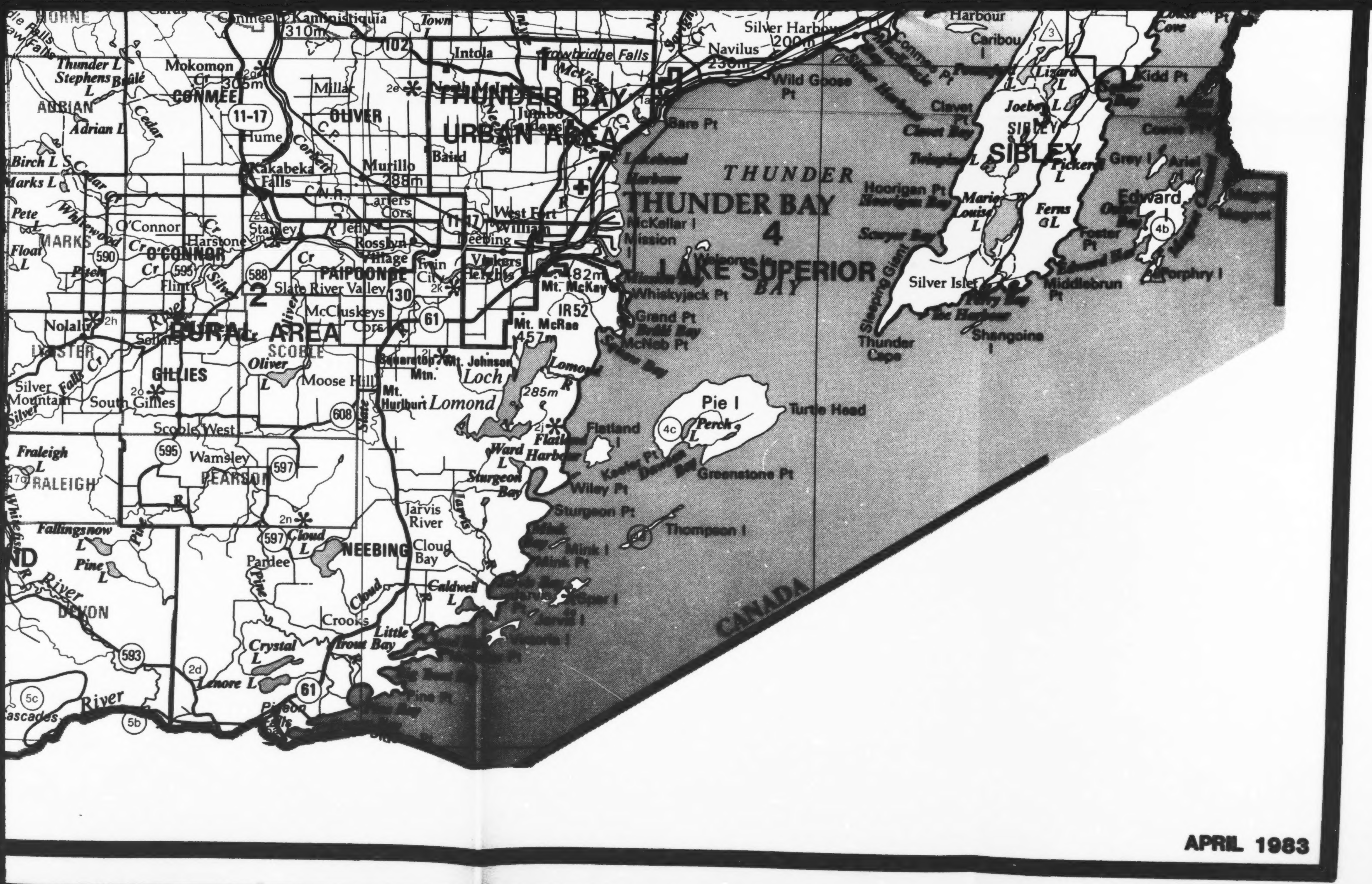

SHEBANDOWAN-
LAC DES MILLE LACS
9
8
HURONIAN
17
HINTERLAND
11
DOG LAKE
MATAWIN
7
Mosher L
Bedivere L
Corner L
West Bedivere L
North Arm
Casino L
Edwards L
Blind Bay
Honkonen Narrows
Rock Bay
Maze Bay
Owl I
INWOOD
JOINT
McKay
Cashing
Panache L
Reserve Bay
IR 22 A1
Sand Pt
Poplar Pt
Slot L
Mercutio L
Relief L
Union L
Edna L
Chief Peter L
Baril Bay
Baril Lake
Birch Narrows
Bolton Bay
Little Kashabowie L
Trout Bay
Portage Bay
New Quetico
453m
Owakonze
Huronian
476m
Rolling
Windigoostigwan L
Brulé L
York L
Keego
469m
Planet
Stetham L
Crayfish
Kashabowie
467m
Lily L
Kashabowie L
Davison L
Beaver Bay
Kashabowie Lake
Sabrina Crs
Postans
Kabaigon
453m
9a
Upper Sabrina L
Athelstane Cr
Little Athelstane Swamp
Athelstane L
Rest L
SAVANNE
Savanne
459m
GIBBARD
Jordain L
WARDROPE
Jordain Cr
Jordain Rapids
Little Rapids
Barrier Rapids
Orbit L
Wakinoo L
Trumper L
Demars L
Rivière
James
471m
Lac du Milieu
Sorell L
GOODFELLOW
FALLIS
Argon
ROBSON
Linko
474m
Raith Cr
BLOCK NO 3
River
Gessie L
Good L
Peterkin Cr
Savanne R
Dexter
Ice L
Henderson L
Peterkin L
Argon L
Savanne L
Lanigon L
Modo L
Quilp L
BLOCK NO.2
Dexter L
GOLDING
480m
Raith
McGhie L
Heise L
MICHENER
Fisher
PARRY
Croskery L
Cr
Toole L
McCrimmon L
Cowles L
Swamp
Kabaigon
Far L
Drift L
Drift R
451m
Rossmere
CONACHER
Shebandowan
BLACKWELL
BLOCK NO 1
SOPER
Oskondaga
17
Hadwen L
High Falls
Sunshine
Buda
450m
East
GOLDIE
C.N.R.
C.P.
414m
Flett
FORBES
Crooked Rapids
The Liftover
Buddys Rapids
Silver Falls
Dog Falls
Little Dog L
FOWLER
Burk L
Hawkeye L
Hawk Bay
11e
Big I
421m
LAKE
Buda Bay
Stirrett Bay
Tackle L
Eayrs L
Whitefin
Gutteridge L
Makins L
Livermore
Creighton L
Creighton Bay
Burbidge
Block
East
Kaministiquia
WARE
Tilly L
Tilly
Ames
River
11
802
Upper Shebandowan Lake
D
Loch Erne
Shelter I
Harnden
Greenwater L
Little Greenwater
Macdougall
Middle Shebandowan
Shafton
Rossmere Bay
9c
590
Lower Shebandowan Lake
Annex
449m
Burchell L
Burchell Lake
Skimpole
Cyclone
Firefly L
Rainbow L
MOSS
Moss L
Fountain L
Grouse L
Waverly L
Waverly Cr
Watershed L
Squeers L
Horseshoe L
Dakota L
Peewatai L
BEGIN
Tinto L
LAMPORT
Kekekuab L
Gold L
DUCKWORTH
LAURIE
Graham L
Pinecone L
Cloven Hoof
Hoof L
Cascade L
Kekek Cr
Shabaqua
378m
Lower Falls
Anita
Glenwater
HORNE
Middle Falls
McGraw Falls
Shebandowan
DAWSON ROAD LOTS
Kamarka
360m
Ellis
Sunshine
366m
Garda
River
Strawberry
Kaministiquia
310m
Toimela
Townline
102
Obadinaw L
Wawiag
Deatys L
Greenwood L
Powell L
McGinnis L
Clay L
Windblown L
Redfox L
Wye L
Home L
Myrt L
Sleigh L
Hood L
Heart L
Nelson L
Slush L
Gloomy L
Singabits L
Twinhouse L
Plummer L
Ross L
Tiny L
Long
Nelson Cr
Swallow L
Carson L
Flower L
Murphy L
Blossom L
Whalen L
Young L
Young Cr
Batwing L
Perching L
Gull L
Blunder L
Chambers L
Topaz L
Lks
McGrath L
Matawin
Mason L
Doone L
Titmarsh
Titmarsh Cr
4a
Carson Cr
Serpent
SACKVILLE
Thunder L
Stephens L
Brûlé
ADRIAN
Adrian L
Cedar
Twin Birch L
Marks L
Pete L
ALDINA
O'Connor
Mokomon
Cr
305m
CONMEE
Millar
OLIVER
11-17
Hume
Kakabeka Falls
Murillo
288m
C.N.R.
Stanley
Carters Cors.



DOG LAKE
11
12
SPRUCE-CURRENT
12
2
RURAL AREA
4
LAKE SUPERIOR
BLACK BAY
DORION
SHUNIAH
SIBLEY
THUNDER BAY URBAN AREA
1
GORHAM
WARE
FOWLER
JACQUES
PARRY
BLOCK NO 1
FORBES
CONMEE
OLIVER
McMASTER
GLEN
Tackle L
Eayrs L
Whitefish
Gutteridge L
Scandrett L
Smiley L
Makins L
Livermore L
McGaughey L
Creighton L
Creighton Bay
River
Croskery L
Fisher
Toole L
McCrimmon L
Hadwen L
Buda Bay
Big I 421m
Stirrett Bay
North Bay
East Bay
DeCourcey
Kingstone L
Hosking
Inter L
Tease L
MacMillan L
Anders L
Upper Wolf L
Manchester L
Seagull L
Moraine L
Abigogami L
Unknown
Moraine Cr
Wolfpup L
Venice L
Wolf
Mott L
Edmondson L
Spruce R
McWhinney L
Keefer L
Pace L
Speireman L
Burbidge L
Macauley L
Astrop Cr
Astrop L
Lasseter L
Hicks L
Hicky L
Greenwich Cr
Greenwich L
Innes L
Wiggins L
Dorion 206m
Dorion Landing
Delaney I
Swallownest L
Steepledge L
Current L
Ray L
Yorky L
McLeish L
Bleecham L
Aberdeen L
Swanwick L
Prain L
Phair L
Brink L
Monday L
Sunday Cr
Odette L
Spirit L
Escape Cr
Escape L
Fitzpatrick L
MacKenzie L
Hindick L
MacIntosh L
Coldwater Cr
Hilma L
Bowker
Bisect L
Tartan L
Wideman L
Nalla L
Ancliff 225m
Granite Pt
Green I
McEachan I
11-17
Mary L
Crock L
Hardwicke L
Hawkeye L
Hawk L
Florence L
Two Island L
Island L
Barnum L
Lottit L
Burk L
Onion Lake
Current R
Whitelily L
Kingfisher L
Retto L
Walkinshaw L
Magone L
Walkinshaw Cr
MacKenzie R
Bass L
Pearl
Loon L
Silver L
Loon 319m
C.N.R.
255m
Pass Lake
High Falls
Dog Falls
Silver Falls
Little Dog L
Crooked Rapids
The Kiftover Paddys Rapids
Kaministiquia River
Oskondaga R
Sunshine
589
Trout L
Surprise L
Hazlewood L
Ferguson Cr
591
Lappe
Golding L
Stepstone
Bentley L
Penassen Lakes
Mackenzie 278m
Beck
Knobel Pt
Amethyst Harbour
Caribou I
Johnsons Landing
Lamb Bay
Copper Pt
Knudsens Cor
587
3
Silver Harbour 200m
Navilus 230m
Wild Goose Pt
Clavet
Kidd Pt
Lizard L
Joeboy L
Pickerel L
Marie Louise L
Ferns L
Sawyer Bay
4b
Toimela
Town
Trowbridge Falls
Intola
102
Strawberry
McVicar
Dawson Road
Flett
Dunmark 360m
Ellis
Sunshine
366m
Garda
Conmee
Kaministiquia 310m
Mokomon
Thunder L
Stephens L
Brûlé
305m
Millar
Adrian L
Cedar
Hume
Kakabeka Falls
C.N.R.
C.P.
Murillo 288m
Baird
West Fort
McKellar I
Conners Cor
2a
2b
2f
2i
2e



HINTERLAND
17
HINTERLAND
MATAWIN
7
6
NORTHERN LIGHT LAKE CORRIDOR
17
HINTERLAND
6
17
HINTERLAND
2
RURAL AREA
5
BOUNDARY WATERS
Waverly L
Waverly Cr
Watershed L
Squeers L
Tinto L
Kekekuab L
Graham L
DUCKWORTH
LAURIE
HORNE
Glenwater L
Garda
Conmee
Kaministiquia
310m
102
Obadinaw
Wawiag
Deatys
Hood L
Heart L
Nelson L
Clovenhoof L
Hoof L
Hoof Cr
Cascade L
Kekek Cr
Murphy L
Blossom L
Flower L
Whalen L
Young L
Young Cr
Swallow L
Carson L
Batwing L
Middle Falls
McGraw Falls
Serpent Cr
Thunder L
Stephens L
Boulé
Mokomon Cr
305m
CONMEE
Millar
OLIVER
11-17
Hume
C.P.
Corbett
Powell L
Clay L
McGinnis L
Myrt L
Deatys L
Sleigh L
Windblown L
Redfox L
Wye L
Home L
Greenwood L
Slush L
Singabits L
Twinhouse L
Gloomy L
Plummes L
Ross L
Tiny L
Long L
Elevation L
Cunniah L
Moose L
Weikwabinonaw Channel
Nelson Cr
Titmarsh Cr
Perching
Gull
Chambers L
Topaz L
Blunder L
Matawin
Lks
McGrath L
Mason L
Doone L
Jacob L
Titmarsh L
River
7a
Batwing Cr
Carson Cr
SACKVILLE
ADRIAN
Adrian L
Cedar
Twin Birch L
Marks L
Cedar Cr
Pete L
Whitewood Cr
O'Connor
Harstone
Stanley
Jeff
Rosslyn Village
Kakabeka Falls
Murillo
288m
C.N.R.
Carters Cors
ALDINA
MARKS
Float L
Pitch L
590
O'CONNOR
595
Flint
Silver
588
2d
Slate River Valley
PAIPOONGE
Twin City
130
McCluskeys Cors
61
Northeast Arm
Trafalgar Bay
Savage Bay
Northern Light Lake
Koss L
Weikwabinonaw L
Kamikun L
Edith L
Swamp Cr
Jade L
Jinx L
Flatrock L
Head L
Joe L
Little Gull L
JEAN
STRANGE
Whitefish
Nolalu
2h
LYBSTER
Sellars
River
GILLIES
SCOBLE
Oliver L
Moose Hill
Mt. Hurlburt
Cutran Bay
Saganagons
436m
Paradise
Shaco L
Reta L
Sprucefir L
Whistle Cr
Sunbow L
Yellowhammer L
Sandstone L
Sandstone Cr
Mackies
17b
Suomi
Silver Mountain
Silver Falls Cr
South Gillies
2o
Spoon L
South Arm
South Bay
Icarus L
Canthook L
Fortune L
467m
Roundtable L
Whitefish L
405m
Sunset L
Scoble West
608
Greiss
Melvin L
Prelate L
Iron Range L
Atik L
Lake
SHARDWICK
6c
Castle L
Cameron L
LISMORE
Sunset Cr
17c
Fraleigh L
FRALEIGH
595
Wamsley
PEARSON
597
Granite L
Greer L
Sunbeam L
Addie L
Arrow
River
Pine L
Gunflint Lake
5b
North L
Rose L
Baker L
Watap L
West L
Wabindon L
Wabindon L
Arrow L
Pigeon
Moose L
5b
ROBBINS
HARTINGTON
Jackpine
Whitefish R
Fallingsnow L
Pine L
River
Pine R
Jarvis River
Cloud L
597
2n
NEEBING
Cloud Bay
Pardee
North Fowl
South Fowl L
DEVON
Crooks
Little Trout Bay
Crystal L
593
2d
Lenore L
61
Pigeon Falls
5c
The Cascades
River
5b
5 0 5 10 15 20 Kilometres
5 0 5 10 15 Miles



THUNDER BAY URBAN AREA
THUNDER BAY
4
LAKE SUPERIOR
THUNDER BAY
RURAL AREA
2
SIBLEY
CANADA
CONMEE
OLIVER
O'CONNOR
PAIPOONGE
MARKS
ADRIAN
SCOBLE
GILLIES
LYBSTER
FRALEIGH
PEARSON
NEEBING
DEVON
Conmee
Kaministiquia
310m
Mokomon
305m
Intola
Trowbridge Falls
Silver Harbour
200m
Navilus
230m
Wild Goose Pt
Bare Pt
Millar
Hume
Jumbo Gardens
Baird
Murillo
288m
Kakabeka Falls
Carters Cors
Stanley
O'Connor
Harstone
Rosslyn Village
West Fort William
Neebing
Vickers Heights
Twin City
Slate River Valley
Flint
McCluskeys Cors
Mt. McKay
182m
IR52
Mt. McRae
457m
Nolalu
Sellars
Silver Mountain
South Gillies
Moose Hill
Mt. Johnson
Loch Lomond
285m
Mt. Hurlburt
Scoble West
Wamsley
Jarvis River
Cloud Bay
Pardee
Crooks
Pigeon Falls
Cascades
McKellar I
Mission I
Welcome Is
Whiskyjack Pt
Grand Pt
McNab Pt
Pie I
Turtle Head
Flatland I
Perch L
Greenstone Pt
Wiley Pt
Sturgeon Pt
Sturgeon Bay
Thompson I
Mink I
Mink Pt
Spar I
Jarvis I
Victoria I
Pine Pt
Caribou I
Clavet Pt
Hoorigan Pt
Sleeping Giant
Silver Islet
Thunder Cape
Shangoina I
Middlebrun Pt
Kidd Pt
Edward I
Porphyry I
Grey I
Ariel I
Foster Pt
Marie Louise L
Ferns L
Pickerel L
Joeboy L
Lizard L
Thunder L
Stephens L
Adrian L
Birch L
Marks L
Pete L
Float L
Fraleigh L
Fallingsnow L
Pine L
Crystal L
Lenore L
Caldwell L
Little Trout Bay
Oliver L
Ward L
Flatland Harbour
Cloud L
River
11-17
102
590
595
588
130
61
608
597
593
2d
2h
2o
2n
2j
2k
2e
5c
5b
4b
4c
3

APRIL 1983

POOR

QUALITY

ORIGINAL